THINK TWICE BEFORE YOU POST: THE IMPACT OF ONLINE SELF-PRESENTATION ON THE SELF-CONCEPT

by

GUIDO LANG

A dissertation submitted to the Graduate Faculty in Business in partial fulfillment of the requirements for the degree of Doctor of Philosophy, The City University of New York

2012

This manuscript has been read and accepted for the Graduate Faculty in Business in satisfaction of the dissertation requirement for the degree of Doctor of Philosophy.

Marios Koufaris, PhD

Date	Chair of Examining Committee

Joseph Weintrop, PhD

Date	Executive Officer

Raquel Benbunan-Fich, PhD

Daniele Artistico, PhD

Supervisory Committee

THE CITY UNIVERSITY OF NEW YORK

Abstract

THINK TWICE BEFORE YOU POST: THE IMPACT OF ONLINE SELF-PRESENTATION ON THE SELF-CONCEPT

by

Guido Lang

Advisor: Marios Koufaris, PhD

The present work investigates the impact of online self-presentation on the self-concept. Online self-presentation is the goal-directed activity of publishing information on the Internet in order to influence the impressions formed by an online community about oneself. Web-based applications such as personal homepages, blogs, and social network sites facilitate online self-presentation. Prior studies found that the content of one's online self-presentation is influenced by various internal and external demands. Moreover, research has shown that self-presentation in non-mediated, face-to-face environments, can change one's self-concept. In this context, the present work addresses the following questions: How does the way one presents oneself online affect one's self-concept? Under what circumstances is a person's online self-presentation likely to lead to a self-concept change? What are the potential consequences of an altered self-concept? I develop a theoretical model based on self-identification theory, which suggests that self-presentation impacts the self-concept through a process of inference and spreading memory activation. I propose that the impact of online self-presentation on the self-concept is moderated by system factors (i.e. visibility, identifiability, and restrictiveness), online community factors (i.e. size and importance), and user factors (i.e. self-monitoring and self-concept clarity). In three sequential experiments (total $N = 969$), I test the proposed relationships by inducing participants

to present themselves online as a risk-seeker while manipulating system and online community factors. Subsequently, I measure participants' risk self-concept using self-report, behavioral, and social perception measures. Results suggest that online self-presentation can change one's domain-specific self-concept – an outcome referred to as carryover effect – if people are led to recall and share specific memories relating to a particular content domain. Moreover, I found that system, online community, and user factors do not significantly influence the carryover effect. Lastly, my findings suggest that the self-concept has domain-specific consequences for one's behavior as well as for one's social perception. However, these consequences are greatly influenced by the characteristics of a given sample. Given the nascent stream of research on online self-presentation, the present work makes significant theoretical and practical contributions while opening multiple avenues for future research.

Acknowledgements

I would like to express my deepest gratitude to the members of my dissertation committee: Drs. Marios Koufaris, Raquel Benbunan-Fich, and Daniele Artistico. Dr. Koufaris has instilled a critical view of research in me that will guide me throughout my professional future in academia. Moreover, he saw the potential of this research since its first incarnation as a term paper and never stopped believing in it. I am forever grateful for his excellent guidance and encouragement during these formative years. Dr. Benbunan-Fich's pragmatic approach to research and her seemingly endless knowledge of references made this dissertation become a reality. Early in my doctoral studies, she ignited my passion for research on social media and has since helped me develop this work from the first idea to the final product. Dr. Artistico provided me with relentless support as an insightful committee member and friend. I am deeply grateful for all that he has done for me.

I would also like to thank the faculty and staff at Baruch College. Specifically, I would like to thank the Executive Officer of the doctoral program in business, Dr. Joseph Weintrop, for his guidance and support during the past four years. I would also like to express my gratitude to Dr. Al Croker, chair of the Department of Statistics and Computer Information Systems, for his inspiring thoughts and regular entertaining discussions. Also, I am thankful for the insights and critical feedback I received during the excellent doctoral seminars held by Drs. Hammou Elbarmi, Radhika Jain, Thomas Kramer, Karl Lang, Kannan Mohan, and Ronald Neath. Moreover, I would like to thank Drs. Bill Ferns, Linda Friedman, Richard Holowczak, Nanda Kumar, and Isak Taksa for their helpful comments and great support during my doctoral studies. Lastly, I would like to thank Natalie Bartholomew and Leslie De Jesus for their help in finding my way through the complex administrative system of the City University of New York.

In addition, I would like to thank external faculty who have significantly shaped my doctoral experience. Particularly, I am thankful to Dr. Curtis Hardin of Brooklyn College, who opened my eyes to the world of experimental social psychology. Also, I am grateful to Dr. Tessa West of New York University, who provided me with a solid introduction to structural equation modeling. The knowledge I gained during their doctoral seminars significantly influenced my dissertation work.

I am also thankful for the help of my fellow doctoral students in information systems, namely Chi-Wen Chen, Stanislav Mamonov, Tamilla Mavlanova, Alex Palaez, and Jim Samuel. Their encouragement was invaluable. Moreover, they kept me sane and focused during the past four years while also making the whole doctoral experience a lot of fun.

Last, but certainly not least, I would like to thank my family and friends for their support. I am grateful to my parents, Inge and Günther Lang, and grandparents, Ilonka and Georg Lang, for encouraging me to always follow my passion and giving me the opportunity to explore the world while pursuing my studies. Finally, I would like to thank my girlfriend, Sarohini Chahal for her love and support. She helped me overcome even the toughest challenges on this journey – with her ideas, discussions, and willingness to listen to my lectures for hours on end.

Table of Contents

List of Tables

List of Figures

Introduction

Personal homepages, blogs, social network sites, and other forms of social media are technologies that facilitate online self-presentation. I use the term online self-presentation to refer to the goal-directed activity of publishing information on the Internet in order to influence the impressions formed by an online community about oneself (based on Schlenker, 2003). In the early days of the Internet, solid knowledge of hypertext markup language (HTML) was required to create and maintain a personal homepage. Now, using such services as Wordpress, Tumblr, Twitter, or Facebook, anyone can begin to present himself[1] online, within a matter of minutes and with limited computer skills. The significantly lowered barrier to entry spurred a tremendous growth in social media usage over the last few years. Social media are web-based applications that allow users to share and discuss information (Cortizo, Carrero, & Gómez, 2011). Information in social media is often textual in nature, but can also include various forms of multimedia such as photo, video, or audio. Examples of popular social media include blogs (Blogger, Wordpress, Tumblr), microblogs (Twitter), social network sites (Facebook, LinkedIn), as well as photo (Flickr) and video sharing sites (YouTube). As of the writing of this work, nearly two thirds of Internet users worldwide use some form of social media (McCafferty, 2011).

The way we present ourselves online is not always an accurate representation of who we really are. As previous research has shown, people tend to share information about themselves online that highlights or exaggerates positive aspects, such as their professional accomplishments, while downplaying or altogether omitting negative sides (Ellison, Heino, & Gibbs, 2006; Jung, Youn, & McClung, 2007; Papacharissi, 2002; Turkle, 1995). This behavior is

[1] For the sake of brevity, I use the male pronoun throughout the paper to refer to either men or women.

not surprising, given that self-presentation in traditional face-to-face environments is often motivated by the desire to create a favored identity image in the eyes of others (Schlenker, 1980, 2003; Schlenker & Weigold, 1989). Moreover, adolescents have been found to engage in online self-presentation for the purpose of exploring new identities and developing their ideal self (Boyd, 2008; Ito et al., 2009; Stern, 2008). Due to their computer-mediated nature, web-based applications allow individuals to present themselves in a number of different ways. Online, the technical capabilities of the system expand and at the same time limit the users' ability to present themselves – through forms of text, photo, video, and audio (Walther, 1996, 2007). In addition, companies are increasing their spending on social media marketing campaigns, which aim to encourage people integrating a brand or advertising message into their online self-presentation (Edelman, 2010). As a result, the content of peoples' online self-presentation is subject to a growing number of external influences.

Moreover, on the Internet, due to its ability to enable computer-mediated communication on a global scale, traditional notions of anonymity and audience change. Whereas it used to be the case that most of the interaction on the Internet was anonymous (e.g. on Usenet or Bulletin-Board Systems), the advent of social media has led to an increased reliance on identified communication. Through profiles on online social networks, such as Facebook or Twitter, people can communicate with anyone in a way that is fully identified, as it includes one's real name, photos, and connections to one's social network. As a result, the notion of anonymity on the Internet is changing. As poignantly summarized in a now classic cartoon of a dog using a computer in 1993, it used to be that case that "on the Internet, nobody knows you're a dog" (Steiner, 1993). In the age of identified communication and social media, this is no longer the

case. Thus, one of the goals of the present work is to better understand people's sense of being identified while communicating on the Internet.

The content of one's online self-presentation has potential consequences for the presenter. A number of studies in social psychology found that the content of one's self-presentation in a face-to-face environment shapes one's self-concept, or how one sees oneself (Kelly & Rodriguez, 2006; McKillop, Berzonsky, & Schlenker, 1992; Rhodewalt & Augustsdottir, 1986; Schlenker, Dlugolecki, & Doherty, 1994; Tice, 1992). Specifically, it was found that after presenting oneself with a certain trait in an interview (e.g. as extraverted), people subsequently shift their self-concept in the same direction (e.g. they see themselves as more extraverted). The impact of self-presentation on the self-concept has been referred to as the "carryover effect" (Jones, Rhodewalt, Berglas, & Skelton, 1981). A study in social psychology replicated the carryover effect in a computer-mediated environment (Gonzales & Hancock, 2008). The authors found that after inducing subjects to present themselves as extravert or introvert in a public blog post, they subsequently changed their self-concept to be more in line with their online self-presentation. Since the self-concept exerts a powerful regulatory force on behavior and perception, understanding changes in the self-concept is both theoretically and practically important. Inspired by the seminal work on the carryover effect, the present work aims to address the following research questions: (1) How does the way one presents oneself online affect one's self-concept? (2) Under what circumstances is a person's online self-presentation likely to lead to a self-concept change? (3) What are the potential consequences of an altered self-concept?

To address the above questions, I draw from social psychology literature, specifically self-identification theory (Schlenker, 1982, 1985, 1986; Schlenker & Weigold, 1989). Self-

identification theory suggests that self-presentation influences the self-concept through a process of inference and spreading memory activation, the outcome of which is referred to as the carryover effect. Moreover, self-identification theory proposes that the strength of the carryover effect depends on factors related to the situation, audience, and person of the self-presentation. However, self-identification theory does not make any specific predictions as to if and how certain situation, audience, or person factors moderate the carryover effect in a given environment. As a remedy, I propose to extend self-identification theory with public commitment theory (Kiesler, 1971), psychological ownership (Pierce, Kostova, & Dirks, 2003), and social impact theory (Latané, 1981). Together, these theoretical perspectives allow me to hypothesize how online self-presentation impacts the self-concept and how specific factors related to the system, online community, and user moderate this effect. Specifically, I propose that visibility, identifiability, restrictiveness, online community size, online community importance, self-monitoring, and self-concept clarity moderate the impact of online self-presentation on the self-concept. I test the proposed relationships in three sequential experimental studies (total $N = 969$). In contrast to prior work in social psychology, which focused on the malleability of extraversion and introversion, I focus on the manipulation of the risk self-concept. I induce subjects to present themselves online as a risk-seeker under varying system and online community conditions. Subsequently, I assess subjects' risk self-concept using direct self-report and indirect behavioral and social perception measures.

My findings suggest that online self-presentation can lead to changes in one's domain-specific self-concept. However, such changes only occur if people are led to recall and share specific memories relating to a particular content domain. The key is to activate unique memories, which are likely to trigger the spreading memory activation process underlying the

carryover effect. Moreover, I find that system, online community, and user factors do not exert a significant influence on the carryover effect. Furthermore, my results suggest that the self-concept has domain-specific consequences for one's behavior as well as for one's social perception. However, these consequences are highly domain-specific and are subject to influences by the characteristics of a given sample.

This study makes several important theoretical contributions to the field of information systems and beyond. It applies and extends a novel theoretical framework, self-identification theory (Schlenker, 1982, 1985, 1986; Schlenker & Weigold, 1989), to explain the significant consequences of an online behavior that millions of people engage in on a daily basis. Thus, it introduces a novel theory to a nascent stream of research on online self-presentation. In addition, it extends and tests self-identification theory in the context of online self-presentation. Moreover, it integrates public commitment theory (Kiesler, 1971), psychological ownership theory (Pierce, Kostova, & Dirks, 2003), and social impact theory (Latané, 1981) with self-identification theory to predict specific system, online community, and user factors that are particularly relevant in the context of online self-presentation. In addition, it advances our understanding of the malleability of the risk self-concept. Lastly, it lends empirical support to prior research extending the theory of planned behavior (Ajzen, 1985, 1991) with measures of the self-concept (Fekadu & Kraft, 2001; Hagger & Chatzisarantis, 2006; J. R. Smith et al., 2007; Sparks & Guthrie, 1998; Thorbjørnsen, Pedersen, & Nysveen, 2007).

Furthermore, this study has important implications for practitioners. It suggests that brand marketing should focus on connecting with consumers through shared memories. The recall of memories is a powerful method to influence one's self-concept. Thus, online marketing campaigns might be geared towards having consumers relive past positive experiences with a

brand. Such activities are likely to have a significant impact on the consumers' self-concept, as well as subsequent behavior and social perception. Moreover, this study suggests that the Internet is largely perceived to be public and anonymous. Thus, companies aiming to create a sense of privacy have to engage in considerable amounts of consumer education in order to convince consumers that their behavior truly is private. In addition, companies aiming to create a sense of being identified online should integrate additional measures, such as third-party authentication through online social networks (e.g. Facebook, Twitter, Google+), in addition to simple identification through name and email address. My findings also suggest that audience perception is severely limited online. Specifically, people do not differentiate audience sizes well online, especially when they are just informed about the audience size in writing. Therefore, I suggest using additional visual cues to influence perceptions of audience size online. Lastly, this work suggests personalizing online experiences by gender. In three experiments, I found consistent differences among gender with regards to risk self-concepts. Given that risk and other traits seem to differ systematically by gender, it is surprising that not more e-retailers offer simple, gender-based personalization options on their websites.

The discipline of information systems is well positioned to conduct research on online self-presentation. Given the importance of the information technology artifact in this context (Orlikowski & Iacono, 2001), as well as the overwhelming engagement in online self-presentation on a global scale, it is surprising that researchers in information systems have not yet investigated the potential consequences of online self-presentation. In fact, the present work addresses a recent call for research in information systems, which suggests that "research in information systems needs to evolve to encompass new theories and methodologies that can

address questions posed by social computing, which extends the scope of usage of information and computing tools to the realm of social endeavor" (Parameswaran & Whinston, 2007, p. 337).

The remainder of this paper is structured as follows. First, prior work on online self-presentation is reviewed. Then, the research model and hypotheses based on self-identification theory and its proposed extension with public commitment theory, psychological ownership theory, and social impact theory are developed. Subsequently, the methods, results, and discussion of the three experimental studies are presented. Finally, the paper closes with a general discussion of its findings, limitations and opportunities for future research.

Prior Research on Online Self-Presentation

Based on Schlenker's (2003) original definition of self-presentation, I use the term online self-presentation to refer to the goal-directed activity of publishing information on the Internet in order to influence the impressions formed by an online community about oneself. It is evident from this definition, that controlled act of publishing information on the Internet is central to the activity of online self-presentation. Facebook's "News Feed" controversy in 2006 nicely illustrates the importance of online self-presentation for the social network site's millions of users (for a description of the controversy, see Boyd & Hargittai, 2010; Debatin, Lovejoy, Horn, & Hughes, 2009). The "News Feed" was a new feature introduced by Facebook in 2006, which automatically broadcasts users' actions (including profile changes and application-specific activities) to their network of friends. Although this information had previously been accessible on each individual user's profile page, the "News Feed" actively publishes it, thus rendering the information more visible to the online community. Since users had no control over if and how their online self-presentation was published in the "News Feed," a significant backlash quickly ensued.

Despite the technical shortcomings of certain social media applications and the overall reduction in media richness and social presence immanent in computer-mediated communication (Daft & Lengel, 1986; Short, Williams, & Christie, 1976), a growing amount of research in information systems and related disciplines shows that people use the Internet in general, and social media in particular, to engage in online self-presentation (DeAndrea & Walther, 2011; DeAndrea, Shaw, & Levine, 2010; Gibbs, Ellison, & Heino, 2006; Jung, Youn, & McClung, 2007; H. Kim & Papacharissi, 2003; J. Kim & Lee, 2011; Marwick & Boyd, 2010; Mehdizadeh, 2010; Papacharissi, 2002; Raban, 2009; Schau & Jensen, 2003; Toma & Hancock, 2010). Prior

work in this realm can be categorized as focusing either on the antecedents, strategies, or consequences of online self-presentation.

Among the first investigations of online self-presentation were studies focusing on self-presentation strategies in personal homepages (Papacharissi, 2002; Schau & Jensen, 2003). Their findings suggest that individuals use a variety of design tools to strategically present themselves and "stage an online performance through which the individual's personality or aspects of it were revealed" (Papacharissi, 2002, p. 654). Subsequent research focused on the identification of antecedents to online self-presentation strategies. Findings highlight the importance of motives (e.g. entertainment, self-expression, professional advancement, see Jung et al., 2007), cultural backgrounds (DeAndrea et al., 2010; H. Kim & Papacharissi, 2003), physical attributes (Toma & Hancock, 2010), personality traits (Mehdizadeh, 2010), and imagined audiences (Marwick & Boyd, 2010) for the choice of a particular online self-presentation strategy. Additional research focused on the potential consequences of online self-presentation. Results of these studies indicate the importance of online self-presentation for subjective well-being (Kim & Lee, 2011), knowledge contribution to online communities (Ma & Agarwal, 2007; Raban, 2009), and online dating success (Gibbs et al., 2006). Furthermore, a recent study revealed the detrimental consequences of inconsistencies between the contents of online and offline self-presentations on trust towards friends and acquaintances (DeAndrea & Walther, 2011).

In line with research in information systems on the consequences of online self-presentation and highly relevant to the present work is a study in social psychology by Gonzales and Hancock (2008), which investigates the impact of computer-mediated self-presentation on the self-concept. The authors compared the impact of self-presentation in a public and identified blog post vis-à-vis self-presentation in a private and anonymous Word document on the self-

concept. Subjects were randomly assigned to present themselves as extravert (introvert) in a public and identified blog post or a private and anonymous Word document. Subsequently, a self-report measure evaluated subjects' level of extraversion. Interestingly, subjects in the public and identified blog post condition later rated themselves as more (less) extravert than subjects in the private and anonymous Word document condition. Unfortunately, the authors confounded the medium (blog vs. Word document), the visibility of the online self-presentation (public vs. private), and the anonymity of the user (anonymous vs. identified). The present study partially aims to address these shortcomings and expand the seminal research by Gonzales and Hancock (2008).

To gain a richer understanding of how online self-presentation impacts the self-concept and which potential consequences might arise out of a self-concept change, I draw from self-identification theory (Schlenker, 1982, 1985, 1986; Schlenker & Weigold, 1989). Moreover, to understand under what circumstances online self-presentation is likely to lead to a self-concept change, I extend self-identification theory with theories of public commitment, psychological ownership, and social impact. The following section introduces, expands, and applies self-identification theory to the context of online self-presentation.

Self-Identification Theory

Self-identification theory (Schlenker, 1982, 1985, 1986; Schlenker & Weigold, 1989) aims to explain the interplay between the expression of the self and the construction of the self. It builds on a long tradition of research in social psychology, including early work on symbolic interactionism (Cooley, 1902; James, 1890; Mead, 1934), which acknowledges the importance of social interaction in shaping the self. Self-identification is the process, means, or result of constructing one's identity through self-presentation (Schlenker, 1986, p. 23). In essence, self-identification theory proposes that the expression of self, also known as self-presentation, has an influence on the self-concept.

The self-concept[2] is a cognitive schema that encompasses all knowledge about who one is, including beliefs about one's traits, physical characteristics, roles, values, goals, etc. (Markus & Kunda, 1986). Early research held the self-concept to be a unitary, monolithic entity – a generalized and average view of the self – that resists change and maintains stability (Sullivan, 1953). However, subsequent work found that the self-concept is best viewed as a multifaceted phenomenon, a dynamic structure that contains a multiplicity of self-beliefs (Burke, 1980; Higgins, Klein, & Strauman, 1985; Hoelter, 1985; Schlenker, 1980; Stryker, 1980). Due to its vast nature, only a subset of all self-beliefs is active in the self-concept at any point in time. Aspects of the self that are important to the individual are more likely to be part of the self-concept at any moment. Moreover, the content of the self-concept also depends on "what has been invoked by the individual as a result of an experience, event, or situation" (Markus & Kunda, 1986, p. 859).

[2] In line with Schlenker (1986), I use the terms self-concept, self-knowledge, self, and identity interchangeably.

A comprehensive review of psychological and sociological research on the self-concept found it to be "one of the most significant regulators of behavior" (Markus & Wurf, 1987, p. 300). The self-concept influences how information is perceived, processed, and recalled. In addition, the self-concept has been shown to influence how people perceive others – also known as social perception (Dunning, 2003). Furthermore, it also guides and regulates one's thoughts, feelings, and actions. In fact, a growing amount of current research suggests extending the theory of planned behavior (Ajzen, 1985, 1991) to include the self-concept, which has been found to be a significant and independent predictor of behavioral intentions in addition to attitudes and social norms (Fekadu & Kraft, 2001; Hagger & Chatzisarantis, 2006; J. R. Smith et al., 2007; Sparks & Guthrie, 1998; Thorbjørnsen et al., 2007). Self-identification theory suggests that the contents of the self-concept are especially malleable to self-presentational activities.

Self-presentation refers to "the goal-directed activity of controlling information in order to influence the impressions formed by an audience about oneself" (Schlenker, 2003, p. 492). It is a particular form of impression management, which is a more general term that refers to the goal-directed activity of controlling information in order to influence the impressions formed by an audience (e.g. about a person, group, object, event, or idea). Self-presentation has emerged as an important topic in social psychology after being popularized by sociologist Erving Goffman in his classic *The Presentation of Self in Everyday Life* (1959). Although early work on self-presentation focused solely on motives of deception and manipulation, where individuals are pretending to be someone they are not (Buss & Briggs, 1984), subsequent research suggests that self-presentation, like any social activity, is guided by a whole range of motives (Schlenker & Weigold, 1992). Thus, self-presentation is best viewed as a pervasive component of any social

activity, occurring among strangers, friends, and in long-standing relationships such as marriage (Schlenker & Wowra, 2003).

A number of studies have shown that self-presentation can influence the contents of the self-concept, an outcome referred to as "carryover effect." The term carryover effect was coined by Jones and colleagues (Jones et al., 1981) in response to the surprising finding that people change their self-concept in the direction of their self-presentation. In their seminal study, subjects were instructed to present themselves either in a self-enhancing or self-deprecating way during a fictitious job interview. Subsequent measures of self-esteem found that subjects that were instructed to be self-enhancing showed higher self-esteem than subjects that were instructed to be self-deprecating. Ensuing studies confirmed the generality of the carryover effect by inducing subjects to present themselves with a certain personality trait (e.g. independence, emotional stability, extraversion, and sociability) and later measuring their self-concept (Kelly & Rodriguez, 2006; McKillop et al., 1992; Rhodewalt & Augustsdottir, 1986; Schlenker, Dlugolecki, & Doherty, 1994; Tice, 1992).

Self-identification theory proposes that the process by which self-presentation influences the self-concept depends on the discrepancy between the self-presentation and prior self-beliefs. When self-presentations are highly discrepant from prior self-beliefs that are important, strong, and well defined, they are likely to initiate an active process of rationalization. In contrast, when self-presentations are fairly corresponding to prior self-beliefs or when prior self-beliefs are trivial, weak, and ambiguous, they are likely to initiate a passive mode of inference and memory activation. Since most of the time in everyday life, peoples' self-presentations do not involve gross misrepresentation, but rather nuanced exaggerations or understatements (Schlenker,

Dlugolecki, & Doherty, 1994), the present work focuses on the passive mode as an explanation for the carryover effect.

Drawing from prior work on self-perception theory (Bem, 1972), self-identification theory suggests that the carryover effect is due to a process of inference and memory activation. People infer aspects of their self-concept on the basis of their behavior. In essence, people look at their own behavior as seen from an imaginary third person's perspective. By presenting oneself in a certain way, one infers to possess the personality traits underlying the self-presentation. Subsequently, related cognitions about past behaviors and experiences become salient, making them more accessible in memory. The heightened salience of these cognitions shifts the content of the self-concept to be in line with the content of the self-presentation. For example, a person has relatively ambiguous self-beliefs regarding his health consciousness (e.g. importance of good diet, regular exercise, personal hygiene, etc.). In a group of health-conscious people, that person wants to blend in and talks about himself as someone who is health conscious. Self-identification theory suggests that as a result of his self-presentation, the person infers that he is in fact more of a health conscious person than he previously thought. In the process, the person begins to remember more and more instances, in which he behaved health-consciously, e.g. when he last exercised or ate a healthy meal. Subsequently, the person's self-concept changes and he ends up seeing himself truly as a health conscious person. Schlenker and colleagues (Schlenker, Dlugolecki, & Doherty, 1994) provide empirical support for the memory activation explanation. They examined the impact of self-presentation on the self-concept and recall. Subjects that were instructed to present themselves as sociable in a fictitious job interview later reported higher levels of sociability and recalled experiences that were more sociable (as rated by judges) than subjects that did not present themselves. Additional support for the memory activation

explanation comes from a study, which investigated the ability to memorize words that are related to the content of a prior self-presentation (Kiesler, 1971, p. 109-121). In line with self-identification theory, subjects that presented themselves were subsequently able to memorize more words related to their self-presentation than subjects that did not present themselves.

I propose to apply self-identification theory to the context of online self-presentation. Although self-identification theory was originally developed to explain the impact of face-to-face self-presentation on the self-concept, I suggest that online self-presentation can also lead to a self-concept change. Self-presentation is fundamentally concerned with the control over information and its influence on the impressions formed by an audience. The same fundamental activity of self-presentation has been shown to take place online. Self-identification theory proposes that the act of self-presentation leads to a process of inference and spreading memory activation. Self-identification theory does not specify if and how computer-mediated communication would interfere with this process. Although computer-mediated communication is different from face-to-face communication in that it is less rich and lower in social presence, I suggest that the actions we take online are still subject to our basic cognitive functions. In fact, people have been shown to engage in very deliberate acts of online self-presentation, which require significant investments of time and energy.

Direct empirical evidence for the impact of online self-presentation on the self-concept comes from a study in social psychology (Gonzales & Hancock, 2008). As discussed earlier, the authors compared self-concept change following a self-presentation in a blog post vis-à-vis a self-presentation in a Word document. The fact that the study found support for a self-concept change following the self-presentation in a blog post provides initial empirical support for my basic proposition. Therefore, I suggest that online self-presentation will lead to a process of

inference and spreading memory activation. As a result, online self-presentation, just like face-to-face self-presentation, will bring about a self-concept change in line with the contents of the online self-presentation. Thus, I hypothesize:

H1: Online self-presentation changes the self-concept in the same direction.

I further propose that changes in the self-concept as a result of online self-presentation will affect changes in related behavior. As discussed above, the self-concept has been found to be a significant regulator of behavior (Markus & Wurf, 1987). In fact, prior research suggests extending the theory of planned behavior (Ajzen, 1985, 1991) to include a measure of the self-concept in order to more accurately predict behavioral intentions and behavior (Fekadu & Kraft, 2001; Hagger & Chatzisarantis, 2006; Smith et al., 2007; Sparks & Guthrie, 1998; Thorbjørnsen et al., 2007). Moreover, changes in the self-concept as a result of self-presentation have been shown to influence behavior in new situations and with different audiences (Kelly & Rodriguez, 2006; Schlenker, Dlugolecki, & Doherty, 1994; Tice, 1992). These behavioral carryover effects are due to a continued activation of the self-concept change in memory. In these studies, subjects were instructed to present themselves as extraverted or introverted and were later unobtrusively observed while interacting with a confederate in a waiting room. Supporting self-identification theory, the studies found that subjects that were instructed to present themselves as extraverted subsequently behaved more extraverted (sitting closer, speaking sooner, longer, and more often) compared to subjects that had presented themselves as introverted.

To the best of my knowledge, this is the first study to investigate the behavioral carryover effect as a result of online self-presentation. I propose that the consequences of a self-concept change resulting out of online self-presentation are equivalent to the consequences of a self-concept change resulting out of face-to-face self-presentation. In essence, online self-

presentation changes the self-concept due to spreading memory activation. Continued memory activation, in turn, alters one's behavior because people's behavior is consciously or subconsciously influenced by their self-concept. As mentioned above, the regulating influence of the self-concept for behavior has been proposed in the context of the theory of planned behavior (Fekadu & Kraft, 2001; Hagger & Chatzisarantis, 2006; J. R. Smith et al., 2007; Sparks & Guthrie, 1998; Thorbjørnsen et al., 2007). Similarly, I suggest that the self-concept regulates behavior. Stated in process terms, online self-presentation changes the self-concept, which in turn influences associated behavior. Thus:

H2: Self-concept is positively related to associated behavior.

In addition to regulating behavior, the self-concept plays a significant role in influencing the perception and processing of information (Markus & Wurf, 1987). Particularly, the self-concept influences social perception – how one perceives others (Dunning, 2003). It has been suggested that the self-concept influences social perception by being a common reference point against which to judge others. For example, when evaluating the degree of athleticism of someone who plays two hours of basketball every week, people rely to a large extent on the recollection of their own behavior. Those who think of themselves as devoting a lot of time every week to athletics will evaluate the target to be less athletic than those who think of themselves as not participating in any athletic activity. Such contrast effects in social perception of traits and abilities have been found for a number of domain-specific self-concepts, including math skills, intelligence, punctuality, and studiousness (Dunning, 2003; Dunning & Cohen, 1992; Dunning & Hayes, 1996).

A recent study (Gibson & Poposki, 2010) provides support for the hypothesis that similar contrast effects can arise out of self-presentation in computer-mediated, non-face-to-face

communication. The study found that subjects who presented themselves with a certain trait (e.g. as introverted, extraverted, smart, confident, or happy) in a one-to-one video chat, subsequently rated themselves as possessing more of the trait in question – thus exhibiting the carryover effect. In addition, the subjects rated their video chat partner (actually a pre-recorded neutral confederate) as possessing less of the trait in question – thus exhibiting a contrast effect between the self-concept and social perception.

However, it is still unknown if online self-presentation in social media (e.g. blogs, social networks), which are characterized by one-to-many and largely text-based communication, can lead to similar contrast effects. I propose that the self-concept influences social perception also in the present context of online self-presentation. In essence, online self-presentation impacts the self-concept, which in turn influences social perception through the above-described continued memory activation. As people change their self-concept following an online self-presentation, their perception of a third person changes in the opposite direction. For example, people that become more risk-seeking following an online self-presentation as a risk-seeker should subsequently view a third person as less risk-seeking than they would prior to the online self-presentation. This contrast effect is due to a continued memory activation following an online self-presentation. Therefore, I suggest that the same contrast effect, which has been documented in related areas, i.e. the self-concept negatively influencing social perception, also holds in an online self-presentation setting. Thus, I hypothesize:

H3: Self-concept is negatively related to associated social perception.

Self-identification theory suggests that factors related to the situation, audience, and person moderate the strength of the carryover effect. However, self-identification theory does not make any predictions regarding which situational, audience, and personal factors are relevant in

any given situation. Thus, I suggest expanding self-identification theory with additional theoretical perspectives in order to derive specific insights into which factors are particularly important in the context of online self-presentation. In the context of online self-presentation, the situation is largely characterized by the system that facilitates the online self-presentation. Similarly, the online community serves as the audience for an online self-presentation. Lastly, the person relates to the specifics of the user in the online self-presentation. Therefore, the following sections discuss theoretical perspectives and develop hypotheses regarding the moderating roles of factors related to the system, online community, and user of the online self-presentation.

System Factors

Self-identification theory proposes that the situation, which is characterized by various environmental-level factors, influences the impact of self-presentation on the self-concept. As mentioned before, self-identification theory does not make any specific predictions regarding which situational factors are particularly relevant in any given situation. In the context of online self-presentation, the situation is captured to a large extent by the characteristics of the system, which serves as a medium for the online self-presentation. In order to gain a deeper understanding of which aspects of the system are important for the strength of the carryover effect, I propose to expand self-identification theory with insights from public commitment theory (Kiesler, 1971) and psychological ownership theory (Pierce et al., 2003).

Public commitment theory (Kiesler, 1971) was originally developed to explain the impact of public, or overt, behavior on attitudes. It proposes that public behavior creates commitment, i.e. it pledges or binds the individual to behavioral acts (Kiesler, 1971, p. 30). Building on cognitive dissonance theory (Festinger, 1957), Kiesler (1971) suggests that individuals are

motivated to resolve any inconsistencies between the attitudes they hold and the behavioral acts they are induced to perform. Because public behavior is explicit and known to others, individuals tend to resolve inconsistencies by changing their attitudes. In the case of an act being inconsistent with one's previous beliefs, commitment to an act leads the person to change attitudes towards greater consistency with the act. However, if an act is consistent with one's previous beliefs, commitment to an act further solidifies attitudes and makes them more resistant to subsequent attack. Similar to self-identification theory, public commitment theory relies on an explanation of cognitive salience and memory activation. As stated by Kiesler (1971, p. 109), "commitment makes salient to the individual those cognitions related to his attitudes."

Kiesler (1971) suggests several routes to increase the degree of commitment to an act, such as by increasing the explicitness, importance, degree of irrevocability, and number of attitudinally-relevant acts performed by an individual. However, at the heart of public commitment theory is the publicness of one's behavior. What determines the degree of publicness is the extent to which the behavior is both (1) visible to an audience and (2) linked to an identity (Salancick, 1977). Thus, in order for behavior to create commitment, it needs to be visible and identified (or non-anonymous). Applied to self-identification theory and the present context of online self-presentation, public commitment theory suggests that system factors related to the visibility and identifiability of one's self-presentation will influence the impact of self-presentation on the self-concept. Visibility will moderate the impact of self-presentation on the self-concept, because public behavior creates a greater sense of commitment to the self-presentation than private behavior (Kiesler, 1971). Public and overt behavior is more difficult to revoke and offers greater possibility for contemplation than private behavior (Goffman, 1959; Schlenker, 2003). Similarly, identifiability will moderate the impact of self-presentation on the

self-concept. Identifiability provides individuals with less freedom to revoke or renounce a self-presentation, thus rendering it more representative and more important to the individual.

Gonzales and Hancock (2008) found support for the foregoing arguments. Subjects were randomly assigned to present themselves as extravert (introvert) in a public and identified blog post or a private and anonymous Word document. Subsequently, a self-report measure determined subjects' level of extraversion. In line with public commitment theory, subjects in the public and identified blog post condition subsequently rated themselves as more (less) extravert than subjects in the private and anonymous Word document condition. Unfortunately, the authors confounded the two system factors of visibility and identifiability. Subjects' self-presentation in the blog post was public and included personally identifiable information. In contrast, subjects' self-presentation in the Word document was private and did not include personally identifiable information. Although conceptually independent and theoretically important, the impacts of visibility and identifiability on the carryover effect have not yet been studied separately.

I use the term visibility to refer to the degree to which other users have access to one's online self-presentation. In essence, visibility is the result of a lenient access restriction. Visibility can be conceptualized as a privacy setting, or technological method, which influences the extent to which one's online self-presentation is shared with other users. It is thus closely related to the concept of information privacy, which refers to the desire of individuals to control or have some influence over data about themselves (Clarke, 1999). Hence, prior research on privacy provides empirical evidence for the importance of visibility as a system factor. A recent comprehensive literature review of published articles on information privacy suggests that users' privacy concerns are a key driver shaping both consumer behavior and personal information

sharing on the Internet (Bélanger & Crossler, 2011). In fact, previous research has shown that the perceived visibility of one's information directly impacts self-disclosure behavior in social network sites (Bateman, Pike, & Butler, 2011).

I propose that visibility is also a key driver and significant moderator in the context of online self-presentation. Specifically, I suggest that visibility is crucial in determining the impact of online self-presentation on the self-concept. A highly visible online self-presentation will create a greater sense of commitment, will be more difficult to revoke, and will offer greater possibility for contemplation than a less visible online self-presentation (Goffman, 1959; Kiesler, 1971; Schlenker & Wowra, 2003). Thus, the more a user perceives his online self-presentation to be highly visible to others, the more he will be affected by it. Stated differently, I propose that greater visibility increases the impact of online self-presentation on the self-concept because of an increased sense of commitment to the online self-presentation. Thus:

H4: Visibility positively moderates the impact of online self-presentation on the self-concept.

I propose that identifiability will moderate the impact of online self-presentation on the self-concept. Identifiability is important because it influences the link between an online self-presentation and a person. An identified online self-presentation can be attributed to an individual. As such, the author feels more attached, or as proposed by public commitment theory, more committed to an identified online self-presentation than an anonymous online self-presentation. Identifiability should matter to an author, even in the absence of an external audience, because the author himself is still and always part of the audience. As proposed by self-identification theory, people look at their own actions as seen from a third-person's perspective. Thus, identifiability influences the author's commitment to his own online self-

presentation, just as it would when an external audience is present. Nevertheless, factors related to identifiability and visibility could potentially interact, as suggested by Gonzales and Hancock (2008).

Early work on group decision support systems (GDSS) provides empirical evidence for the importance of identifiability as a system factor (Pinsonneault & Heppel, 1997). For example, when members of a group in a GDSS are anonymous, they generate more comments, are more critical and probing, and are more likely to embellish ideas proposed by others than are those whose contributions are identified by name (Jessup, Connolly, & Galegher, 1990). Similarly, anonymity was found to increase group members' ability to express true feelings without fear of social disapproval, thus neutralizing the effects of authority and hierarchy in a group (Nunamaker Jr., Applegate, & Konsynski, 1987). Furthermore, research in computer-mediated communication found that anonymity increases group polarization (Choon-Ling, Tan, & Kwok-Kee, 2002). Lastly, anonymity has been found to significantly influence the development of trust in virtual communities (Leimeister, Ebner, & Krcmar, 2005).

Therefore, I suggest that identifiability is an important system factor, which influences the impact of online self-presentation on the self-concept. As mentioned above, identifiability affects commitment, which in turn influences the resulting self-concept change. Although neither self-identification theory, nor public commitment theory were originally developed to account for online self-presentation, I propose that the effect of identifiability also occurs in this context. Prior work on GDSS and virtual communities lend empirical support for this proposition. However, if identifiability in the context of online self-presentation has a similar moderating influence on the carryover effect has not yet been empirically established. In line with public commitment theory, I suggest that individuals who are identified will be more committed to their

online self-presentation, which will subsequently increase the impact on the self-concept, than individuals who are anonymous. Thus I hypothesize:

H5: Identifiability positively moderates the impact of online self-presentation on the self-concept.

Scholars from various disciplines have long explored the psychological aspects of ownership (e.g. Etzioni, 1991; Furby, 1991; Heider, 1958; Litwinski, 1942). However, Pierce and colleagues (Pierce et al., 2003) were the first to develop a comprehensive theory of psychological ownership. They define psychological ownership as "the state in which individuals feel as though the target of ownership or a piece of that target is theirs" (p. 86). It reflects a relationship between an individual and an object, which can be material or immaterial in nature. In contrast to legal ownership, which is specified and protected by the legal system, psychological ownership only manifests itself in the individual who holds this feeling. Psychological ownership theory (Pierce et al., 2003) provides a rich theoretical basis upon which to predict additional system factors that might be particularly relevant in the context of online self-presentation.

Psychological ownership of a target object helps people define themselves and express their identity to others (Pierce et al., 2003, p. 89). The target of psychological ownership can "come to objectify aspects of self-definition" (Dittmar, 1992, p. 85) and even allows people to learn something about themselves. This reasoning is in line with the symbolic interactionist tradition, which suggests that possessions play an important role in the process of developing and shaping the self-concept (Mead, 1934). Thus, the development of psychological ownership of a target object is likely related to changes in the self-concept, as certain aspects of the target object come to be transferred and included in the self-concept. Applied to the present context, this

would suggest that a user's psychological ownership of an online self-presentation increases its impact on the self-concept.

The theory of psychological ownership (Pierce et al., 2003) proposes several key processes through which psychological ownership emerges. The first process, labeled "investing the self in the target" (Pierce et al., 2003, p. 93), suggests that individuals are likely to feel ownership of the things they put effort into creating. The proposition that investing the self in the target leads to psychological ownership is rooted in early work by Locke (1690) and Sartre (1943), which suggests that since we own our labor, we are likely to feel ownership of the things and ideas we create. As stated by Pierce and colleagues, "the most obvious and perhaps the most powerful means by which an individual invests himself or herself into an object is to create it. Creation involves investing time, energy, and even one's values and identity" (p. 93). Since the creation of a self-presentation can involve varying amounts of time, energy, and especially one's values and identity, I suggest that the effort a person puts into creating an online self-presentation influences its resulting impact on the self-concept.

The second route to the emergence of psychological ownership is labeled "controlling the ownership target" (Pierce et al., 2003, p. 92). Prior work in developmental psychology suggests that the control a person has over an object is directly related to the experience of ownership of that target (Furby, 1978; McClelland, 1951). Objects that are controlled by others or that cannot be controlled will not become part of the individual's sense of self. Psychological ownership theory proposes that similar to body parts, material objects can become regarded as part of the self, if one has sufficient control of them. Therefore, "the greater the amount of control a person can exercise over certain objects, the more they will be psychologically experienced as part of

the self" (Pierce et al., 2003, p. 92). Applied to the present context, I suggest that control influences the impact of online self-presentation on the self-concept.

In the present context, the amount of effort and control a person invests in the creation of his online self-presentation is influenced by the system restrictiveness (Silver, 1988, 1990). In its original definition, system restrictiveness refers to "the degree to which and the manner in which a decision support system restricts its users' decision-making process to a particular subset of all possible processes" (Silver, 1988, p. 52). In essence, system restrictiveness recognizes that users' actions are limited by the system's functional capabilities. System restrictiveness is reflected in the set and sequence of activities that users can engage in while using a certain system (Silver, 1990). The fewer the activities supported by a given system, the higher is its restrictiveness. System restrictiveness has been shown to influence users' cognitive effort in decision support systems (Wang & Benbasat, 2009). Specifically, systems that are more restrictive, that is they allow less user input, give less control to the user and subsequently reduce the cognitive effort exerted by the user. Applied to the context of online self-presentation, I propose that restrictiveness decreases the impact of online self-presentation on the self-concept. Since restrictiveness decreases control, which has been shown to decrease effort, and since effort and control are key factors in the development of psychological ownership, the result of a more restrictive system is lower psychological ownership. Psychological ownership, in turn, influences the degree to which an online self-presentation becomes part of the self-concept. Therefore, restrictiveness has a negative moderating influence on the carryover effect. Stated differently, I hypothesize:

H6: Restrictiveness negatively moderates the impact of online self-presentation on the self-concept.

Online Community Factors

Self-identification theory proposes that the audience of one's self-presentation influences the impact of a self-presentation on the self-concept. Examples of audience factors that have been found to strengthen the carryover effect are power, attractiveness, and expertise (Schlenker & Weigold, 1992). However, self-identification theory does not explain or make any specific predictions regarding which audience factors might be relevant in any given situation. Moreover, in the context of online self-presentation, the audience consists of an online community. In order to understand which factors of an online community might influence the impact of online self-presentation on the self-concept, I draw from social impact theory (Latané, 1981).

In 1981, Latané proposed a mathematical theory of social impact in which he specified the factors leading to "the great variety of changes in physiological states and subjective feelings, motives and emotions, cognitions and beliefs, values and behaviors, that occur in an individual, human or animal, as a result of a real, implied, or imagined presence or actions of other individuals" (p. 343). Latané (1981) describes social impact in terms of social force fields comparable to physical force fields that govern the transmission of light, sound, gravity, magnetism, etc. In physics, the amount of light that falls on a surface is a multiplicative function of the number of light bulbs that shine on the surface, their intensity, and their distance from the surface. Similarly, Latané (1981) suggests that the amount of social impact experienced by an individual is a multiplicative function of the strength, immediacy, and number of individuals in the audience. Mathematically, social impact is expressed in the formula $I = f(SIN)$, where *S* is the strength, *I* the immediacy, and *N* the number of individuals in the audience. As the strength (e.g. status, power, ability, etc.), immediacy (e.g. physical distance between an individual and the audience), or number of individuals in the audience increases, the greater the social impact on

the individual. Moreover, the multiplicative relationship between the variables suggests that the effect of any one variable will be greater the greater the value of the other variables. Social impact theory further proposes that as the number of individuals in the audience increases, each additional individual produces less impact than the previous one. Stated differently, the marginally decreasing impact produces a power function relating the number of individuals in the audience and the social impact. This power function is represented by $= sN^t$, where *s* is a scaling constant, *N* is the number of individuals in the audience, and *t* the exponent (which is always < 1). This suggests that although a 5-person audience will produce significantly more social impact than a 1-person audience, a 105-person audience will produce only slightly more social impact than a 101-person audience.

Early research on group conformity provides empirical support for the proposition that social impact increases with an increase in the size of the group. For example, in a replication of the classic Asch experiments (Asch, 1956), subjects had to choose which set of three disparate lines matched a standard, after between one and seven confederates gave incorrect answers (Gerard, Wilhelmy, & Conolley, 1968). In line with social impact theory, subjects increasingly conformed to the group and agreed with their incorrect answers as the group size increased. In addition, research on stage fright provides empirical support for the predictions of social impact theory. Stage fright refers to an anxiety-arousing emotion that occurs under conditions of public speaking, performing, or when placed in a situation involving self-presentation to an audience (Hendrikson, 1948). For example, Latané and Harkins (1976) asked students to imagine reciting a poem in front of audiences consisting of audiences ranging from one to 16 individuals. In order to help students' imagination, the researchers presented photos of the audience. The photos depicted audiences consisting either of teenagers (low status audience) or middle-aged persons

(high status audience). Subsequently, students rated their tension and nervousness. As predicted by social impact theory, tension and nervousness increased with the size of the audience. Moreover, the increase in tension and nervousness followed a power function with an exponent of less than one. Finally, the size and strength variables interacted multiplicatively, with size having a greater impact on tension and nervousness when the audience was high status and strength having a greater effect when audience was large. Subsequent studies investigating the impact of audience size and importance found additional support for the predictions of social impact theory (Jackson & Latané, 1981; Seta, Crisson, Seta, & Wang, 1989; Wolf & Latané, 1983).

Applied to the context of online self-presentation, I suggest that the number and importance of individuals in an online community also affects the impact of self-presentation on the self-concept. Specifically, I propose that an online self-presentation in front of a large and important online community exerts a greater social impact and subsequently leads to a stronger carryover effect, than an online self-presentation in front of a small and unimportant online community. Obviously, the size and importance of an online community will only matter, if the online community has actually access to the online self-presentation. Thus, the previously mentioned system factor of visibility is likely to interact with online community size and importance. For the following discussion, I assume that the online self-presentation takes place under conditions of high visibility, which gives the online community access to the online self-presentation.

Just like the term community, online community seems to mean many things to many people and there is not one generally accepted definition of online community in the literature. In fact, scholars in sociology have been debating the meaning of community since the 1950s, which

has been collectively referred to as the "Community Question" (Wellman, 1979). The Community Question reveals that the meaning of community is continuously affected by changes in "informatization, computerization, bureaucratization, industrialization, and urbanization", suggesting it will "remain open to the end of time" (Wellman et al., 2003). A similar debate around the meaning of online community ensued in the early 2000s (Porter, 2004; Preece & Maloney-Krichmar, 2005). For example, an early definition of online community refers to a group of people with common interests and practices that communicate regularly and for some duration in an organized way over the Internet through a common location or mechanism (Ridings, Gefen, & Bay, 2002). The common location or mechanism can be implemented technically in a number of different ways, such as through listservs, newsgroups, or chat rooms (Lazar & Preece, 1998). In line with this definition, research suggests that people in an online community have some notion of membership and form personal relationships with others in the community (Sproull & Faraj, 1997). Moreover, prior work found that online communities often develop unique behavioral norms and expectations (Sproull & Kiesler, 1991).

However, technological developments on the Internet, specifically the rise of social network sites and blogs, have shaped the meaning of online community once more (Stern, 2008). Whereas the earlier definition of online community required an organization around common interests, online communities can now also be organized around people. In essence, novel forms of online communities place the individual at the center of their own online community, creating "egocentric" online communities (Boyd & Ellison, 2007). As prior research has shown, individuals are keenly aware of their audience, or online community, when posting something on a social network site or a blog (Qian & Scott, 2007). Likewise, I suggest that factors related to

the perception of an online community are also important for the emergence of the carryover effect in the context of online self-presentation.

As proposed by social impact theory, the social impact experienced by an individual is positively related to the number of individuals in an audience. The more people there are in audience, the more an individual feels pressure to conform to the audience's expectations. Applied to the present context, this suggests that the impact of an online self-presentation on the individual's self-concept will be positively related to the number of individuals in an audience. A person who presents himself online in front of a large online community will feel greater pressure to conform to the audience's expectations, which in turn are shaped by the online self-presentation. Thus, a larger online community will increase the social impact, which ultimately results in a stronger impact of the online self-presentation on the self-concept. Empirical evidence for the importance of audience size comes both from prior research on online communities (e.g. Butler, 2001) and virtual teams (e.g. Alnuaimi, Robert Jr., & Markuping, 2010; Chidambaram & Tung, 2005; Suleiman & Watson, 2008, Valacich et al., 1995), which found that membership size is a key factor influencing an individual's intended and actual communication behavior. In the context of online self-presentation, I propose that audience size influences the carryover effect on the self-concept due to the audience's social impact, with a larger audience resulting in a stronger impact. Thus:

H7: Online community size positively moderates the impact of online self-presentation on the self-concept.

In addition to number of sources, social impact theory also proposes that the strength of the sources influences social impact. Strength of the sources refers to the perceived importance of the individuals in the audience. According to social impact theory, factors that influence the

importance of an audience are the individuals' status, age, socio-economic factors, prior relationship with, and future power over, the target. As mentioned above, research on stage fright provides empirical evidence for the influence of audience importance on social impact. In a follow-up study to Latané and Harkins (1976), Jackson and Latané (1981) asked students to imagine themselves singing "Star Spangled Banner" in front of a variety of different audiences. Again, the subjects were shown photos of the audiences, which consisted of between one and nine undergraduate students (low-status condition) or professors from the music department (high-status condition). Subjects provided ratings of their tension and nervousness. The findings replicate those of a prior study, which indicate that important audiences produce greater tension, nervousness, and potential embarrassment than unimportant audiences (Garland & Brown, 1972). Applied to the present context, I propose that online self-presentation in front of an important audience will lead to a stronger social impact than online self-presentation in front of an unimportant audience. The increased social impact then translates into a stronger carryover effect of the online self-presentation on the self-concept. Thus:

H8: Online community importance positively moderates the impact of online self-presentation on the self-concept.

User Factors

Self-identification theory suggests that the impact of self-presentation on the self-concept differs from person to person. Responsible for this difference are individual-level characteristics related to one's personality traits. Because self-identification theory does not explicate if, why, and how certain personality factors might be relevant in a given situation, I propose to focus on two individual-level differences that have been shown to be highly relevant in the context of self-

concept change, namely self-monitoring (Gangestad & Snyder, 2000; Snyder, 1974) and self-concept clarity (Campbell et al., 1996).

A key individual-level characteristic that should influence the impact of online self-presentation on the self-concept is self-monitoring (Snyder, 1974). The theory of self-monitoring concerns the "antecedents and consequences of variation in the extent to which individuals strategically cultivate public appearances" (Gangestad & Snyder, 2000, p. 530). In essence self-monitoring refers to a trait that determines how much people monitor and regulate their expressive behavior. High self-monitors are highly responsive to social and interpersonal cues and actively adapt their self-presentation to create a desired and appropriate public appearance. In contrast, low self-monitors do not have the same desire for the situational appropriateness and their expressive behavior is more influenced by their attitudes, emotions, and dispositions. A plethora of studies have investigated the relationships between self-monitoring and other concepts, including the ability to accurately perceive social cues (Costanzo & Archer, 1989; Funder & Harris, 1986), the accessibility of personal attitudes and the self-concept (DeBono & Snyder, 1995; Kardes, Sanbonmatsu, Voss, & Fazio, 1986), and responsiveness to situational cues in judgments about the self (Chen, Schechter, & Chaiken, 1996; Jones, Brenner, & Knight, 1990). In the context of consumer behavior, self-monitoring was found to be a significant predictor of susceptibility to influence by advertisements that appeal to associated images vis-à-vis product quality (DeBono & Packer, 1991; Shavitt, Lowrey, & Han, 1992). Lastly, self-monitoring has been applied to the field of group management, where it was found to influence the emergence of leaders in groups (Anderson & Tolson, 1989; Cronshaw & Ellis, 1991).

Self-monitoring should also influence the impact of online self-presentation on the self-concept. Because people high in self-monitoring are more concerned with their online self-

presentation and the image they give off, they are subsequently also more likely to be influenced by it. In essence, self-monitoring influences the attention one gives to an online self-presentation, which influences both its antecedents (e.g. how much time and effort is spent on creating the online self-presentation) and its consequences (e.g. how much the online self-presentation subsequently affects the individual). Initial support for this claim stems from one of the seminal studies on the carryover effect (Tice, 1992), which found that people high in self-monitoring were subsequently more likely to shift their self-concept in the direction of their self-presentation than people low in self-monitoring. Thus, I hypothesize:

H9: Self-monitoring positively moderates the impact of online self-presentation on the self-concept.

A growing body of research suggests that people differ in the extent to which they have a clear idea of their self-concept (Baumgardner, 1990; Campbell, 1990; Campbell & Lavallee, 1993; Campbell et al., 1996; Setterlund & Niedenthal, 1993). Thus, people not only differ in what they think about themselves, but also in how that information is organized and accessible in memory. Self-concept clarity refers to the extent to which the contents of an individual's self-concept (e.g. perceived personal attributes, roles, values, personal goals) are clearly and confidently defined, internally consistent, and temporally stable (Campbell, 1990). Self-concept clarity is best characterized as a personality trait, as supported by exhibited test-retest reliability over five-month intervals. Several studies have investigated the link of self-concept clarity to personality traits and related concepts. A comparison of North American and Japanese samples revealed a high correlation of self-concept clarity with self-esteem for respondents in North America, where a clearly articulated self-concept is culturally encouraged (Campbell et al., 1996). Moreover, people high in self-concept clarity tend to score high on measures of

extraversion and low on measures of neuroticism, anxiety, and depression (Smith, Wethington, & Zhan, 1996). The same study found that people with a clear self-concept tend to prefer active coping strategies, whereas people low in self-concept clarity prefer more passive coping strategies.

More closely related to the present context, people high in self-concept clarity have been found to be more malleable to the foot-in-the-door technique than people low in self-concept clarity (Burger & Guadagno, 2003). The foot-in-the-door technique is a sequential-request compliance procedure that has been widely studied in the field of social psychology (for a review, see Burger, 1999). The foot-in-the-door procedure consists of two sequential requests for a favor – a small request followed by a related, but much larger one at a later point in time. If successful, the procedure elicits a higher compliance rate to the larger request than is found in a control condition in which only the larger request is presented. For example, subjects that agreed to a request to put a small sign promoting driver safety in their window at home were subsequently more likely to agree to a request to put a very large sign promoting driver safety in their front lawn than subjects that only received the request for the large sign (Freedman & Fraser, 1966).

Similar to self-identification theory, the underlying explanation of the foot-in-the-door technique is based on self-perception theory (Bem, 1972). Agreeing to a small request, such as placing a small sign in a window, alters the self-concept by making aspects related to helpfulness more accessible in memory. In essence, a person looks at his own behavior – agreeing to place the small sign in the window – and infers that he must be a helpful person. This inference process, in turn, activates related cognitions, such as memories of other times when he was helpful. The next time that person is asked for a larger request, such as putting a very large sign

on the front lawn, he is more likely to agree since he already sees himself as more of a helpful person than someone who has not been asked for a small request first. As found by Burger and Guadagno (2003), for people with a clearly defined self-concept, the influence of spreading memory activation on the self-concept is stronger than for people with low self-concept clarity, since the latter are less able to rely on clearly organized memory during the spreading memory activation process. As a result, people with high self-concept clarity were found to be more susceptible to the foot-in-the-door technique (Burger & Guadagno, 2003).

Likewise, self-concept clarity should influence the impact of online self-presentation on the self-concept. People high in self-concept clarity should be more prone to self-concept change as a result of online self-presentation than people low in self-concept clarity. The reasoning is equivalent to the foot-in-the-door effect outlined above. For people high in self-concept clarity have a clearly and confidently defined self-concept, their online self-presentation should bring about a stronger and more effective process of memory activation, resulting in a more pronounced self-concept change. Thus, I hypothesize:

H10: Self-concept clarity positively moderates the impact of online self-presentation on the self-concept.

In summary, to address the questions of how online self-presentation affects the self-concept, under what circumstances this is likely to occur, and what potential consequences might follow from a self-concept change, I apply and extend self-identification theory. Applied to the present context, self-identification theory suggests that online self-presentation influences the self-concept through a process of inference and spreading memory activation, an outcome referred to as the carryover effect. Moreover, self-identification theory proposes that the strength of the carryover effect depends on factors related to the situation, audience, and person of the

self-presentation. However, self-identification theory does not make any specific predictions as to if and how certain situation, audience, or person factors moderate the carryover effect in any given environment. As a remedy, I draw from various theories, including public commitment, psychological ownership, social impact, self-concept clarity, and self-monitoring, to extend self-identification theory. Figure 1 depicts the research model reflecting the carryover effect of online self-presentation on the self-concept (H1), its impact on behavior (H2) and social perception (H3), the moderating influences of system factors (H4: visibility; H5: identifiability; H6: restrictiveness), online community factors (H7: size; H8: importance), and user factors (H9: self-monitoring; H10: self-concept clarity).

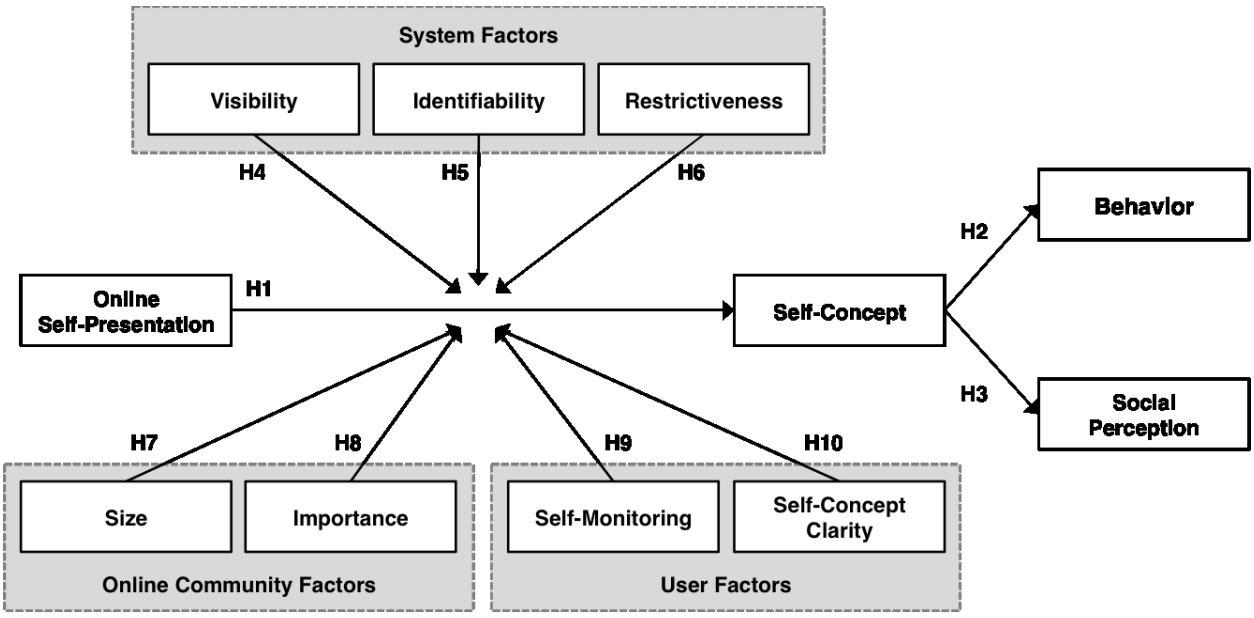

Figure 1. Research Model

Study Overview and Operationalization

The purpose of this study is to examine the impact of online self-presentation on the self-concept and its consequences on behavior and social perception. In this context, this study investigates the moderating influence of system factors (visibility; identifiability; restrictiveness), online community factors (size; importance), and user factors (self-monitoring; self-concept clarity) on the relationship between online self-presentation and the self-concept. Although a full factorial design would be advantageous to gain a complete understanding of all possible interactions between the five moderating factors with at least two levels (e.g. low vs. high), the resulting 2^5 (32) conditions would require a large number of subjects. Moreover, some factor combinations, such as large community size under low system visibility, do not make sense. Lastly, no specific hypotheses regarding the interactions between the moderating factors were made, which further reduces the need for a full factorial design.

Therefore, the present study employs an incomplete factorial design (Trochim & Donnelly, 2007). In an incomplete factorial design, not all factor level combinations are examined. Instead, some factor levels are held constant, thus reducing the total number of conditions considerably. As a result, I conducted three sequential experiments, which – taken together – provide a test of the full research model. Specifically, Experiments 1 and 2 manipulate online self-presentation, visibility, and identifiability while measuring a user's degree of self-monitoring. Both of these experiments use samples of undergraduate students. Experiment 3 manipulates online self-presentation, visibility, restrictiveness, and online community size, while measuring both a user's degree of self-monitoring as well as his self-concept clarity. In contrast to the first two experiments, Experiment 3 uses a sample of adults from over 30 different

countries, recruited through Amazon Mechanical Turk. Table 1 summarizes the overall study design of the present work.

I adapt the experimental procedure from prior work on the carryover effect (Kelly & Rodriguez, 2006; Schlenker, Dlugolecki, & Doherty, 1994; Tice, 1992). Given that these studies successfully replicated the carryover effect in different conditions, I adhere to the basic experimental procedure as much as possible, while adapting it to the present context of online self-presentation.

Table 1. Study Design

Independent Variable	Experiment 1	Experiment 2	Experiment 3
Online Self-Presentation	Manipulated	Manipulated	Manipulated
Visibility	Manipulated	Manipulated	Manipulated
Identifiability	Manipulated	Manipulated	-- [a]
Restrictiveness	Manipulated	Manipulated	Manipulated
Online Community Size	-- [a]	-- [a]	Manipulated
Online Community Importance	-- [a]	-- [a]	Measured
Self-Monitoring	Measured	Measured	Measured
Self-Concept Clarity	-- [a]	-- [a]	Measured

Note: [a] Variable not included (i.e. neither manipulated nor measured) in this Experiment.

In prior work, the experimental procedure generally consists of the two steps: (a) subjects are instructed to present themselves as possessing more or less of a given personality trait during a self-presentation task; (b) subjects complete a post-test measure of the personality trait that was part of the self-presentation. Subsequently, researchers evaluated the impact of self-presentation

on the self-concept by comparing the average of the personality trait measures in the treatment group with those of a control group (or with additional treatment groups). Since subjects are not made aware of the true purpose of a study, or of the various between-group conditions, differences between the groups are attributed to the differences in the treatment conditions.

The cover story in previous work consists of subjects being told that they serve as a stimulus person for the training of counseling-psychology graduate students (Kelly & Rodriguez, 2006; Schlenker, Dlugolecki, & Doherty, 1994; Tice, 1992). Subjects are informed that the graduate students would try to determine whether the subject possesses certain personality traits. In an interview, the subject would be asked to answer several questions about themselves (e.g. about their past relationships with same- and opposite-sex friends, family plans, extracurricular activities, and the most important thing learned in college). Ostensibly because the graduate students need to gain experience in assessing different personality traits, subjects are asked to present themselves with a certain personality trait (e.g. extraversion or introversion) during the interview. Thus, in prior studies, subjects were induced to present themselves with a certain personality trait by making a few statements about themselves.

The present study follows the general experimental procedure and cover story outlined above. However, in contrast to prior work, which focuses on the malleability of personality traits such as introversion and extraversion through face-to-face self-presentation, this study focuses on the malleability of the risk self-concept as a result of online self-presentation. The risk self-concept refers to the general tendency to take risks, which exposes a person to danger, harm, or loss (Meertens & Lion, 2008). Risk self-concept is chosen because of its importance in business, economics, and general decision-making situations and because of the availability of validated self-report and behavioral measurements (Zaleskiewicz, 2001). Research on risk as a personality

trait followed a similar pattern as that of personality traits in general (Blais & Weber, 2006). While first considered a stable personality characteristic, subsequent research suggests a more complex definition that acknowledges situational determinants while preserving generality in the way personality traits shape behavior across situations (Mischel & Shoda, 1995).

Moreover, risk has been at the center of several important streams of research in information systems. Numerous investigations on the impact of risk on e-commerce consumer behavior found that consumer risk attitude is a significant detriment to the adoption of e-commerce among consumers (Dinev, 2006; Dinev et al., 2006; Featherman, Valacich, & Wells, 2006; McKnight, 2002; Van Slyke, 2006). Similarly, previous work identified risk perceptions as an important influence for successful information technology project management, especially as it relates to escalation of commitment behavior (Keil et al., 2000; Lim, Sia, & Yeow, 2011; Liu, Zhang, Keil, & Chen, 2009). Moreover, it was found that risk attitudes play a fundamental role in the decision of if and how companies outsource software development to third parties (Aron, Clemons, & Reddi, 2005; Baldwin, Irani, & Love, 2001; Gefen, Wyss, & Lichtenstein, 2008; Ramachandran & Gopal, 2010; Schwarz et al., 2009; Willcocks & Lacity, 1999). Lastly, prior work found support for the notion that risk attitudes impact companies' information technology security management and end-user policies (Guo et al., 2011; Straub & Welke, 1998; Sun, Srivastava, & Mock, 2006). Given the influence of situational determinants, as well as the central role of risk in information systems research, a deeper understanding of the malleability of the risk self-concept in response to online self-presentation is of significant theoretical and practical importance. The following sections present the methods, results, and discussion for Experiments 1, 2, and 3, respectively.

Experiment 1

Methods

The purpose of Experiment 1 is to test (a) if online self-presentation as a risk seeker impacts one's risk self-concept, (b) if visibility, identifiability, and restrictiveness of one's online self-presentation moderate its impact on the self-concept, (c) if self-monitoring moderates the impact of online self-presentation on the self-concept, and (d) if risk self-concept is related to risk behavior and social perception of risk. Whereas visibility, identifiability, and restrictiveness are all manipulated independent variables, self-monitoring is a measured independent variable. Thus, there are 2 (visibility: public vs. private) × 2 (identifiability: identified vs. anonymous) × 2 (restrictiveness: restricted vs. unrestricted) (8) treatment conditions. In addition, there is a control group, which does not engage in online self-presentation. Table 2 provides an overview of the treatment conditions in Experiment 1.

After completing a pretest measure of general risk self-concept, participants were randomly assigned to treatment or control conditions. Participants in the treatment conditions were asked to create an impression of being a risk-seeker while introducing themselves on a blog. Depending on the treatment condition, participants' online self-presentation differed with regards to its visibility, identifiability, and restrictiveness. Participants in the control group did not get a chance to introduce themselves on the blog. Subsequently, all participants completed posttest measures examining their domain-specific risk self-concepts, risk-related behavior, and social perception.

Table 2. Treatment Conditions in Experiment 1

	Manipulated Variable		
Group	Visibility	Identifiability	Restrictiveness
1	Public	Identified	Unrestricted
2	Public	Identified	Restricted
3	Public	Anonymous	Unrestricted
4	Public	Anonymous	Restricted
5	Private	Identified	Unrestricted
6	Private	Identified	Restricted
7	Private	Anonymous	Unrestricted
8	Private	Anonymous	Restricted
9	Control (No Online Self-Presentation)		

Participants

Four hundred fifty six participants, who were students at a large urban, Northeastern American university, participated in exchange for partial course credit (worth 2.50% of the final grade) as part of a departmental subject pool. I removed 50 (12.32%) participants because they did not follow the study instructions. Specifically, 32 (7.88%) participants did not write anything on the blog, 12 (2.96%) did not complete all dependent variables, and 6 (1.48%) did not write about the assigned topic. In order to determine if the participants I removed were randomly distributed across all treatment conditions, I conducted independent sample *t*-tests for each treatment condition using dummy variables for participants (coded "1" if removed and "0" otherwise) (Hair et al., 2009). None of the tests reached significance ($p > 0.10$), suggesting that

participants who did not follow the study instructions were equally likely to be among the different treatment conditions. Subsequently, I was left with 406 usable responses. Forty-seven percent of the participants were male and participants' mean age was 23 years (SD = 4.57). The distribution of participants between experimental groups was roughly equal (see Table 3).

Table 3. Number of Participants per Group in Experiment 1

Group (n)									
1	2	3	4	5	6	7	8	9	Total (N)
43	45	44	45	45	48	44	48	44	406

Procedure

The purpose of the study was described to participants broadly as "understanding risk attitudes." The study was advertised in the departmental subject pool management system and participants completed the study in groups of maximum 30 students in a computer lab on campus. Upon arriving at the lab, participants received written instructions that guided them to the online survey. After giving informed consent, participants answered a one-item general risk self-concept measure ("I view myself as a…") on a scale from 0 ("Risk Avoider") to 100 ("Risk Seeker"). The following task induced subjects to engage in the online self-presentation.

Online self-presentation was manipulated by having participants write about themselves on an experimental website. Participants were informed that the researchers are interested in "understanding how well you can create an impression of being a risk-seeker when introducing yourself on a blog." They were asked to visit the Personality Research Blog, purportedly a "popular blog on research in personality and social psychology." Unbeknown to the participants was the fact that the researchers created the Personality Research Blog for the purpose of this

study. To increase realism, the blog included numerous blog posts that were in line with the overall theme of the blog. Participants were asked to use the comment form on the blog and introduce themselves as they would when meeting someone for the first time. Their goal was to create as strong of an impression of being a risk-seeker as possible, while still being relatively honest about themselves. To further increase realism, the Personality Research Blog was pre-populated with three comments, supposedly written by other study participants, which talked about the joys of taking risks in such activities as skydiving, gambling, and snowboarding. Appendix A provides a detailed description of the experimental instructions as seen by the participants.

Participants were randomly assigned to one of nine conditions: eight treatment conditions and one control group. For participants in the control group, the Personality Research Blog did not have a comment form, but instead displayed a statement announcing that the researchers had received enough responses and that they were to continue with the survey. Thus, participants in the control group visited the Personality Research Blog but did not get a chance to engage in online self-presentation. For participants in any of the eight treatment conditions, the Personality Research Blog displayed a comment form at the bottom of the page. Publicness, identifiability, and restrictiveness of the online self-presentation were manipulated as follows.

Publicness was manipulated by making participants' responses publicly visible on the Personality Research Blog. In the private condition, participants were informed that their response would not be posted on the blog, but only be visible to the researchers. After submitting their response, participants were redirected to a confirmation page, which stated that their response was sent to the researchers. In the public condition, participants were informed that their response would be posted on the blog and be visible to 1000 study participants from their

university. After submitting their response, participants saw their own comment posted on the blog. Unbeknown to the participants was the fact that each participant received an individualized link to a different page on the Personality Research Blog. Although all pages on the Personality Research Blog looked identical, this ensured that every participant would only see his comment in addition to the three prepopulated comments. Thus, participants in the public condition were led to believe that their comment would be visible to anyone participating in this study, when in fact their comment was only visible to themselves and the researchers.

Identifiability was manipulated by requiring participants to provide their name and email address. In the anonymous condition, participants were asked not to reveal their name or any personally identifiable information. Consequently, the comment form did not include name or email fields, but consisted only of one main comment field. In the identifiable condition, participants were asked to provide their name and university email address. Consequently, the comment form included mandatory name and email fields in addition to the main comment field.

Restrictiveness was manipulated by limiting the length of participants' responses on the Personality Research Blog. In the unrestricted condition, the default size of the comment field was 18 lines, with the option to add more text through scrolling. Thus, participants in the unrestricted condition were not restricted with regards to their response length. In the restricted condition, participants were informed that their response length was limited to 160 characters, or about 2 lines. In addition, the restriction was technically implemented by strictly enforcing a maximum comment field length of 160 characters. The choice of 160 characters as a maximum length was influenced by popular short-messaging platforms, such as Twitter messages and Facebook status updates.

After completing the online self-presentation task on the Personality Research Blog, the participants returned to the online survey. They were informed that, for the remainder of the survey, the researchers were interested in how the participants really viewed themselves, as this might have affected their ability to create an impression of being a risk-seeker on the Personality Research Blog. Participants subsequently completed the following dependent measures in random order.

Risk behavior was measured by asking participants to play a computer game and perform as best as they can. The computer game was in fact the Balloon Analogue Risk Task (BART; Lejuez et al., 2002), a behavioral measure of risk taking. In the game, participants are asked to pump up several balloons and accumulate virtual money for each pump. However, if a balloon explodes, participants loose their virtual money. Each balloon explodes after a random number of pumps (min. 25, max. 70), which is unknown to the subjects, but constant between subjects. Behavioral risk is measured as the average number of pumps on unexploded balloons. Risk attitudes as measured by the BART have been associated with real-world risk-related behaviors, including drinking, smoking, drug use, gambling, stealing, and unprotected sexual intercourse (Lejuez, Aklin, Zvolensky, & Pedulla, 2003). In line with previous work on the carryover effect (e.g. Tice, 1992), the present work does not include a filler task before measuring the dependent variables.

Social perception of risk was measured by asking participants to carefully read a description of a fictitious person, Jack, and subsequently rate how they view Jack ("I view Jack as a…") on a scale from 0 ("Risk Avoider") to 100 ("Risk Seeker"). Participants rated Jack based on the following description:

Jack is 21 years old and an undergraduate student in business at a public university in the Northeastern United States. In his free time, he likes to hang out with friends. On the weekends, he enjoys going to bars and occasionally clubbing. He is an avid soccer player and a member of his university's soccer team. In the winter, Jack enjoys skiing in the nearby mountains. He lives in the city, sharing an apartment with two roommates. He works part-time as a retail associate and has saved several thousand dollars. Part of his savings he invested in the stock market, while keeping the majority in a savings account. Upon graduation, Jack plans to get an entry-level position in a large accounting firm.

The description of Jack aimed to stimulate a relatively neutral social perception of risk in order to capture any potential increases or decreases in social perception of risk as a result of a change in the risk self-concept.

Risk self-concept was measured using the Domain-Specific Risk-Taking Scale (DOSPERT; Blais & Weber, 2006). The DOSPERT consists of 30 statements and asks subjects to indicate the likelihood that they would engage in the described activity if they were to find themself in that situation. I adopt the DOSPERT as a measure of risk self-concept because it assesses general risk tendencies as opposed to behavioral intentions. The statements cover six risk domains: ethical risk (e.g. "passing of somebody's work as your own"), investing risk (e.g. "investing 5% of your annual income in a very speculative stock"), gambling risk (e.g. "betting a day's income on the outcome of a sporting event"), health/safety risk (e.g. "driving a car without wearing a seatbelt"), recreational risk (e.g. "bungee jumping off a tall bridge"), and social risk (e.g. "disagreeing with an authority figure on a major issue").

After the dependent measures, participants completed the 18-item self-monitoring scale (Gangestad & Snyder, 2000). Following the recommendations outlined by Gangestad and Snyder

(2000), I created a single self-monitoring score for each participant by scoring each true/false item per the authors' guidelines and summing the resulting scores. As a result, participants have a single self-monitoring score from "0" (i.e. low self-monitors) to 18 (i.e. high self-monitors). Lastly, participants answer manipulation checks and demographic questions. After completing all dependent measures, participants were fully debriefed, thanked for their participation, and dismissed.

Results

Since I only collected a posttest measure of the domain-specific risk self-concept, I cannot directly test if and to what extent subjects changed their domain-specific risk self-concepts over the course of the experiment. I can, however, compare average differences in domain-specific risk self-concepts across experimental groups. This analysis, however, assumes that the experimental groups did not differ with regards to domain-specific risk self-concepts at the onset of the experiment. In order to account for potential pre-existing differences in domain-specific risk self-concepts, I include age, gender, and the pretest general risk self-concept measure as covariates. This allows me to partial out the variance due to potential pre-existing differences and treatment effects between the experimental groups. Thus, I compare differences in domain-specific risk self-concept between experimental conditions after controlling for pre-existing differences due to age, gender, and general risk self-concept.

Following the recommendations by Gefen, Straub, and Boudreau (2000), I considered three different statistical methods – namely linear regression, partial least squares (PLS) regression, and covariance-based structural equation modeling (SEM) – to analyze the data. In contrast to linear regression, both PLS and SEM can simultaneously assess the loadings of observed items on their expected latent constructs while testing the assumed causation among a

set of dependent and independent variables. Thus, PLS and SEM provide a more rigorous analysis of a proposed research model than linear regression. More recently, Gefen, Rigdon, and Straub (2011) suggest that PLS and SEM "are very different in their underlying philosophy, distributional assumptions, and estimation objectives" (p. v). Specifically, the authors argue that PLS is better suited for exploratory research as it shares the modest distributional and sample size requirements of ordinary least squares linear regression. Although I build on a relatively well-established theoretical base with measures that have been used in prior research, my sample size in each experimental group is relatively small (i.e. less than 50 per cell). Thus I believe that PLS is the best statistical method available to test the hypothesized relationships. A recent literature review of top information systems journals reveals that PLS has been previously used in experimental research (Qureshi & Compeau, 2009).

In order to examine the hypothesized relationships between online self-presentation and self-concept, as well as the moderating roles of visibility, identifiability, and restrictiveness using a PLS approach, I created several dummy variables and included them in the path model. Previous experimental work in information systems using PLS regression analysis also employed dummy variables to code manipulated, independent variables (Cyr et al., 2009). In order to test H1, the impact of online self-presentation on the self-concept, I created a dummy variable that is coded "0" for participants in the control group (i.e. that did not create an online self-presentation) and "1" for participants in the treatment groups (i.e. that created an online self-presentation). Just like in linear regression analysis, a path coefficient in PLS regression analysis from the treatment dummy variable to a dependent variable indicates a mean difference between participants in the control and treatment groups (for an overview of the use of dummy variables in PLS, see e.g. Henseler & Fassott, 2010). Three additional dummy variables were contrast-coded to capture the

hypothesized differences between participants in the two visibility conditions (i.e. private = "-1", public = "1"), two identifiability conditions (i.e. anonymous = "-1", identified = "1"), and two restrictiveness conditions (i.e. restricted = "-1", unrestricted = "1"), representing H4, H5, and H6, respectively. Note that the dummy variables for visibility, identifiability, and restrictiveness are all coded "0" for participants in the control group, and either "1" or "-1" for participants in the treatment groups. Thus, they are interpreted as interactions between online self-presentation and visibility/identifiability/restrictiveness, respectively. Table 4 depicts the different experimental groups and the dummy variable coding.

Table 4. Dummy Variable Coding for Experiment 1

	Group								
Dummy Variable	1	2	3	4	5	6	7	8	9
Online Self-Presentation (OSP)	1	1	1	1	1	1	1	1	0
Visibility (VISI)	1	1	1	1	-1	-1	-1	-1	0
Identifiability (IDEN)	1	1	-1	-1	1	1	-1	-1	0
Restrictiveness (REST)	1	-1	1	-1	1	-1	1	-1	0

I followed the guidelines for modeling and testing of moderation effects in PLS proposed by Chin, Marcolin, and Newsted (2003). In essence, the authors suggest applying a moderated regression analysis approach to PLS. Thus, in a first step, I mean-centered the indicators of the two interacting constructs. Specifically, I mean-centered the indicators of self-monitoring and self-concept clarity, since the dummy variables need no further standardization (Henseler & Fassott, 2010). In a second step, I created a latent interaction term by cross-multiplying the indicators of the two interacting constructs. Third, I included the interaction term in the PLS path

model and performed a path analysis and bootstrapping procedure with 500 resamples. The path coefficient from the interaction term to the dependent variable indicates the statistical significance of the proposed interaction. In the case of a significant interaction, I evaluated the effect size of the interaction by comparing the difference in the squared multiple correlation (R^2) for the main effects model (including the interacting constructs, but excluding the actual latent interaction term) with the interaction model. The difference in R^2 is then used to estimate Cohen's f^2 (1988). In the case of non-significant interactions, I refrain from reporting effect sizes.

Manipulation checks

To assess how far participants perceived that their response on the Personality Research Blog is public, they indicated their agreement with the statement "my response on the blog is visible to anyone who participates in this study" on a scale from 1 ("strongly disagree") to 7 ("strongly agree"). As predicted, participants in the public condition perceived their response to be more public (M = 5.54, SD = 1.89) than participants in the private condition (M = 3.66, SD = 2.24, $t(360) = 8.60$, $p < .001$). To evaluate the extent to which participants perceived that their response on the Personality Research Blog is identified, they indicated their agreement with the statement "my response on the blog is anonymous" on a scale from 1 ("strongly disagree") to 7 ("strongly agree"). As predicted, participants in the identified condition perceived their response to be less anonymous (M = 3.28, SD = 2.52) than participants in the anonymous condition (M = 5.64, SD = 1.85, $t(360) = 10.87$, $p < .001$) To determine if participants perceived that the Personality Research Blog restricted their ability to write a response, they indicated their agreement with the statement "the blog restricted my ability to write a long response" on a scale from 1 ("strongly disagree") to 7 ("strongly agree"). As predicted, participants in the unrestricted

condition perceived the blog to be less restrictive ($M = 2.29$, $SD = 1.50$) than participants in the restricted condition ($M = 4.76$, $SD = 2.12$, $t(360) = 12.75$, $p < .001$). In addition, participants also wrote longer responses (measured in characters) in the unrestricted condition ($M = 552.08$, $SD = 258.16$) than in the restricted condition ($M = 148.50$, $SD = 68.35$, $t(360) = 20.53$, $p < 0.001$). Lastly, participants in the unrestricted condition spent more time (measured in minutes) completing the experiment than participants in the restricted condition ($M_{unrest} = 21.40$, $SD_{unrest} = 6.19$, $M_{rest} = 18.46$, $SD_{rest} = 5.91$, $t(360) = 4.63$, $p < 0.001$).

Measurement model

Following the guidelines for PLS-based confirmatory factor analysis provided by Gefen and Straub (2005), I evaluated item loadings and cross-loadings, average variance extracted (AVE), as well as composite reliability for all latent constructs in the study. An initial assessment revealed that three items related to social risk (i.e. “Starting a new career in your mid-thirties”, “Choosing a career that you truly enjoy over a more secure one”, “Admitting that your tastes a different from those of a friend”), three items related to health/safety risk (i.e. “Sunbathing without sunscreen”, “Walking home alone at night in an unsafe area of town”, “Drinking heavily at a social function”), and three items related to ethical risk (i.e. “Leaving your young children alone at home while running an errand”, “Revealing a friend's secret to someone else”, “Taking some questionable deductions on your income tax return”) exhibit relatively low factor loadings (< 0.50) and high cross-loadings (> 0.30). In the case of social risk, two of the three problematic items are related to career decisions. Given that the participants in this study are undergraduate students who have yet to make career decisions, it seems likely that these items have relatively little meaning to them. In the case of health/safety risk, the problematic items might have simply not been risky enough to be considered risks related to health/safety. Lastly, in the case of ethical

risk, I believe that the participants could not relate well to these items, since many undergraduate students do not have children, nor are they familiar with deductions on income tax returns. Based on these statistical and theoretical considerations, I decided to remove these items from all further analyses. All items, including their respective construct loadings, can be found in Appendix B.

After removing the aforementioned items, all latent constructs exhibit adequate convergent and discriminant validity as well as reliability. As can be seen in Table 5, all items load significantly on their theoretically assigned constructs – a necessary and sufficient condition to establish convergent validity (Gefen & Straub, 2005). Moreover, all item loadings on their respective constructs are an order of magnitude larger (> 0.10) than any other loading. In addition, the square root of every AVE (shown in Table 5 on the diagonal) is larger than 0.50 and also larger than any correlation among any pair of latent constructs. According to Gefen and Straub (2005), the latter two conditions together establish discriminant validity. Lastly, the reliability measures for all latent constructs (also displayed in Table 5) are larger than the suggested cut-off of 0.70 (Straub, Boudreau, & Gefen, 2004).

Table 5. Construct Reliabilities and Inter-Construct Correlations for Experiment 1

Construct		Reliability	1	2	3	4	5	6	7	8
1.	Age	n/a[a]	**1.00**							
2.	BART	n/a[a]	-0.07	**1.00**						
3.	Pretest[b]	n/a[a]	0.10	0.12	**1.00**					
4.	ETH	0.79	-0.13	0.21	0.17	**0.75**				
5.	GAM	0.90	-0.03	0.09	0.23	0.39	**0.87**			
6.	HS	0.81	-0.10	0.17	0.20	0.47	0.40	**0.76**		
7.	INV	0.87	0.02	0.13	0.36	0.22	0.45	0.27	**0.83**	
8.	REC	0.89	-0.04	0.25	0.39	0.29	0.34	0.38	0.38	**0.77**
9.	SOC	0.78	0.02	0.14	0.37	0.22	0.32	0.35	0.39	0.43
10.	Gender	n/a[a]	0.12	-0.12	-0.12	-0.24	-0.15	-0.10	-0.25	-0.16
11.	SM	n/a[a]	-0.17	0.08	0.24	0.17	0.12	0.11	0.11	0.23
12.	SP	n/a[a]	0.01	-0.02	0.05	-0.03	-0.03	-0.07	-0.07	-0.02
13.	OSP	n/a[a]	0.03	-0.08	-0.07	0.02	0.01	-0.05	0.08	-0.04
14.	IDEN	n/a[a]	-0.05	0.01	0.07	0.07	0.11	0.09	0.04	0.03
15.	VISI	n/a[a]	0.02	0.00	0.02	0.03	-0.01	-0.08	-0.07	-0.01
16.	REST	n/a[a]	-0.05	-0.02	0.01	-0.01	0.01	-0.02	-0.04	-0.03

Table 5. (continued)

Construct	Reliability	9	10	11	12	13	14	15	16
9. SOC	0.78	**0.73**							
10. Gender	n/a[a]	-0.05	**1.00**						
11. SM	n/a[a]	0.20	-0.20	**1.00**					
12. SP	n/a[a]	-0.03	0.09	0.04	**1.00**				
13. OSP	n/a[a]	-0.06	0.02	-0.03	-0.05	**1.00**			
14. IDEN	n/a[a]	0.10	-0.07	0.01	-0.06	0.00	**1.00**		
15. VISI	n/a[a]	-0.06	0.05	0.04	0.00	-0.01	-0.01	**1.00**	
16. REST	n/a[a]	-0.04	0.02	0.02	-0.02	-0.01	-0.01	0.01	**1.00**

Note: $N = 406$. Bold-faced number on diagonal is the square root of average variance extracted. [a] Reliability not calculated because construct consists of a single indicator. [b] Pretest measure of general risk self-concept. BART = Balloon Analogue Risk Task, ETH = Ethical Risk, GAM = Gambling Risk, HS = Health/Safety Risk, INV = Investment Risk, REC = Recreational Risk, SOC = Social Risk, SM = Self-Monitoring, OSP = Online Self-Presentation, IDEN = Identifiability, VISI = Visibility, REST = Restrictiveness.

Structural model

Results of the PLS regression analysis are presented in Figure 2. Note that the full PLS model allows for a simultaneous evaluation of all hypothesized relationships.

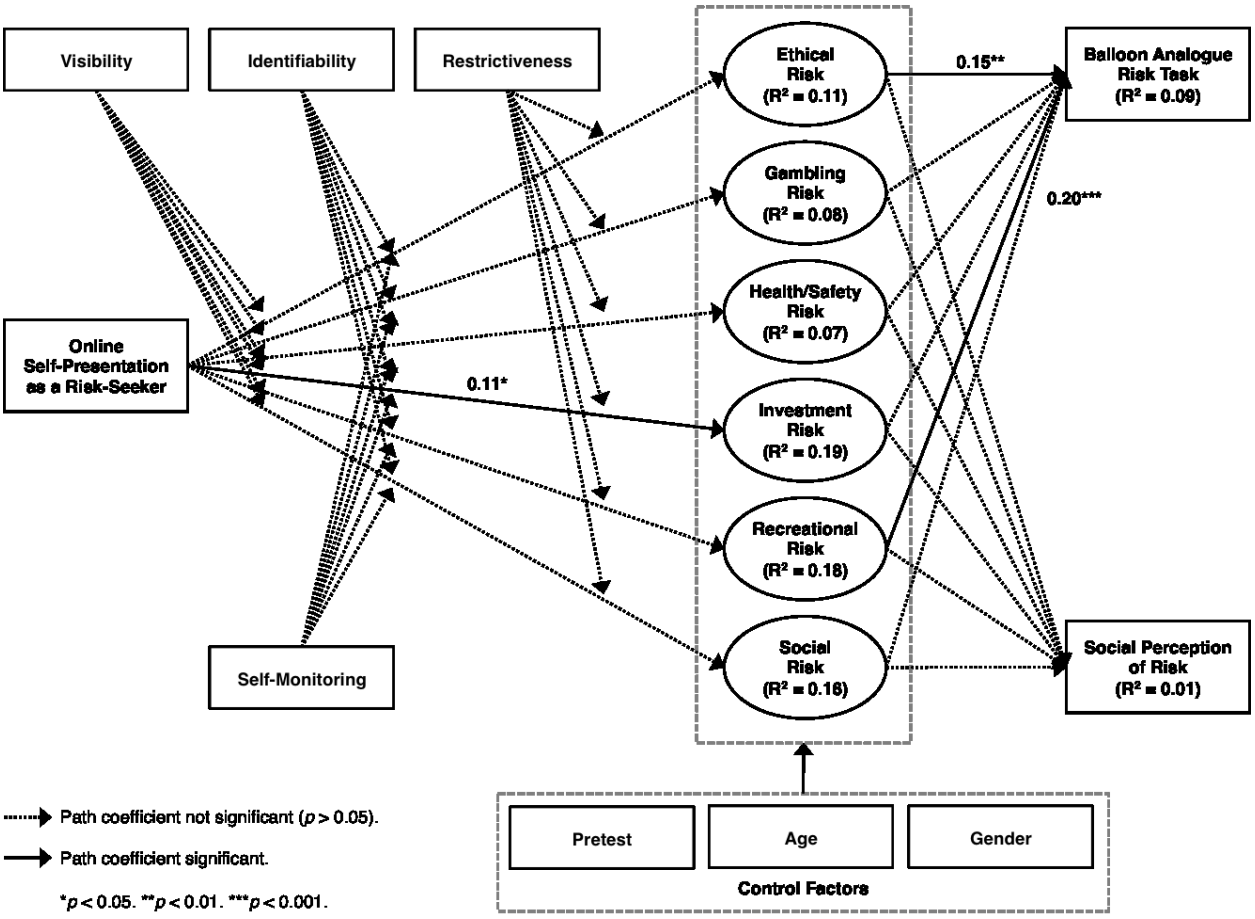

Figure 2: Results of PLS Regression Analysis for Experiment 1

Lastly, the pretest general risk self-concept measure is positively related to all domain-specific risk self-concepts. In other words, participants that rated themselves as more risk-seeking in general at the beginning of the experiment also rated themselves as more risk-seeking in all specific domains of risk at the end of the experiment.

Table 6. Select PLS Regression Path Coefficients for Experiment 1

	Dependent Variable					
Independent Variable	ETH	GAM	HS	INV	REC	SOC
Age	-0.10*	-0.03	-0.10	0.01	-0.05	0.01
Pretest[a]	0.14**	0.21***	0.19***	0.34***	0.35***	0.33***
Gender	-0.20***	-0.11*	-0.05	-0.21***	-0.09	0.02
SM	-0.08	0.06	0.03	-0.05	0.11	0.21
OSP	0.03	0.03	-0.03	0.11*	-0.01	-0.03
OSP × SM	0.16	-0.02	0.02	0.05	0.01	-0.08
IDEN	0.04	0.09	0.07	0.01	0.00	0.07
VISI	0.04	-0.01	-0.08	-0.07	-0.02	-0.07
REST	-0.02	0.00	-0.03	-0.03	-0.03	-0.04
R^2	0.11	0.08	0.07	0.19	0.18	0.16

Note: $N = 406$. All path coefficients are standardized. Statistical significance is evaluated based on bootstrapping with 500 resamples. [a] Pretest measure of general risk self-concept. ETH = Ethical Risk, GAM = Gambling Risk, HS = Health/Safety Risk, INV = Investment Risk, REC = Recreational Risk, SOC = Social Risk, SM = Self-Monitoring, OSP = Online Self-Presentation, IDEN = Identifiability, VISI = Visibility, REST = Restrictiveness.

*$p < .05$. **$p < .01$. ***$p < .001$.

To test H1, the impact of online self-presentation on the self-concept, I evaluated the statistical significances associated with the six path coefficients from the online self-presentation dummy variable (labeled "OSP") to the domain-specific risk self-concept constructs. The significances associated with the path coefficients represent six tests of the null hypothesis that the means of the constructs do not differ between the treatment and control groups. Only one of

the six paths, to investment risk self-concept, is significantly different from zero ($\beta = 0.11$, $t = 2.32$, $p < 0.05$). On average, participants in the treatment groups rated themselves as more risk seeking when it comes to investment risk than participants in the control group, after controlling for differences due to age, gender, and general risk self-concept. Thus, H1 is supported for investment risk self-concept. To test H2, the relationship between self-concept and behavior, I examined the significances associated with the six path coefficients from domain-specific risk self-concept to BART. Two of the six path coefficients are significantly different from zero: ethical risk self-concept ($\beta = 0.15$, $t = 2.88$, $p < 0.01$) and recreational risk self-concept ($\beta = 0.20$, $t = 3.55$, $p < 0.001$). In other words, ethical risk self-concept and recreational risk self-concept are both positively related to risk behavior. Note that the R^2 value associated with the BART measure is relatively small (i.e. 0.09). However, this does not undermine the model's validity. It has been suggested that the actual amount of association between constructs is, in fact, greater than the proportion of variance accounted for by R^2 (Cohen, 1988). Moreover, low R^2 values are not uncommon in behavioral research, as evidenced by a methodologically comparable experimental study using PLS regression analysis (Cyr et al., 2009). Thus, H2 is supported for ethical and recreational risk self-concepts. To test H3, the negative relationship between self-concept and associated social perception, I examined the six paths between the domain-specific risk self-concept constructs and social perception of risk. None of the path coefficients is significant ($p > 0.10$), suggesting that H3 is not supported. To test H4, H5 and H6, the moderating roles of visibility, identifiability, and restrictiveness, I evaluated the statistical significance associated with the paths from the respective dummy variables to the posttest domain-specific risk self-concept constructs. None of the hypothesized paths reached commonly accepted significance levels ($p > 0.10$). Thus, H4, H5, and H6 are not supported. Lastly, to test

H9, the moderating role of self-monitoring, I analyzed the significance of the six paths from the interaction of self-monitoring and online self-presentation on the domain-specific risk self-concept constructs. Again, none of the hypothesized paths reached an acceptable significance level ($p > 0.10$). Thus H9 is not supported. A summary of all hypothesis tests for Experiment 1 is provided in Table 7.

Table 7. Results of Hypotheses Tests for Experiment 1

Hypothesis (Main Variable)	Result
H1 (Online Self-Presentation)	Supported
H2 (Behavior)	Supported
H3 (Social Perception)	Not supported
H4 (Visibility)	Not supported
H5 (Identifiability)	Not supported
H6 (Restrictiveness)	Not supported
H7 (Online Community Size)	--[a]
H8 (Online Community Importance)	--[a]
H9 (Self-Monitoring)	Not supported
H10 (Self-Concept Clarity)	--[a]

Note: [a] Hypothesis was not tested in this Experiment.

Post-hoc analysis

A post-hoc analysis revealed that participants wrote about different domains of risk (e.g. investment, gambling, recreational risk) on the Personality Research Blog. Thus, it is possible that participants exhibited domain-specific changes in their self-concepts following their online

self-presentation. In order to test if the content of one's online self-presentation is related to one's domain-specific risk self-concept, I performed a quantitative content analysis of the responses on the Personality Research Blog. Specifically, I developed an automated keyword detection script that coded participants' responses as belonging to one or several of three categories: investment risk, gambling risk, or recreational risk. These three categories were chosen because they are the most well defined risk categories in terms of being able to automate content categorization. For example, a response involving social risk (e.g. revealing a friend's secret to someone else) would be very difficult to code automatically using a simple keyword detection script. Thus, the script searched for keywords that clearly belonged to a risk domain and categorized responses using three dummy variables (coded "1" if a response includes a keyword and "0" otherwise). The keywords were taken from the domain-specific risk self-concept scales and included, for example, "investing, stock, bonds" for investment risk, "gambling, betting, casino" for gambling risk, and "camping, rafting, skiing, skydiving, bungee jumping" for recreational risk. As a result, 146 (40%) out of 362 responses were categorized as belonging to at least one of the three categories. Among the categorized responses, 94 (64%) mentioned recreational risk, 50 (34%) mentioned gambling risk, and 19 (13%) mentioned investment risk.

Subsequently, the dummy variables were entered as independent variables in a PLS regression analysis. The PLS model tests the extent to which the content of one's online self-presentation predicts the six domain-specific risk self-concepts, after controlling for differences due to gender, age, and general risk self-concept. In addition, the post-hoc PLS model tests the relations from the domain-specific risk self-concepts to risk behavior and social perception of risk. The results are shown in Figure 3.

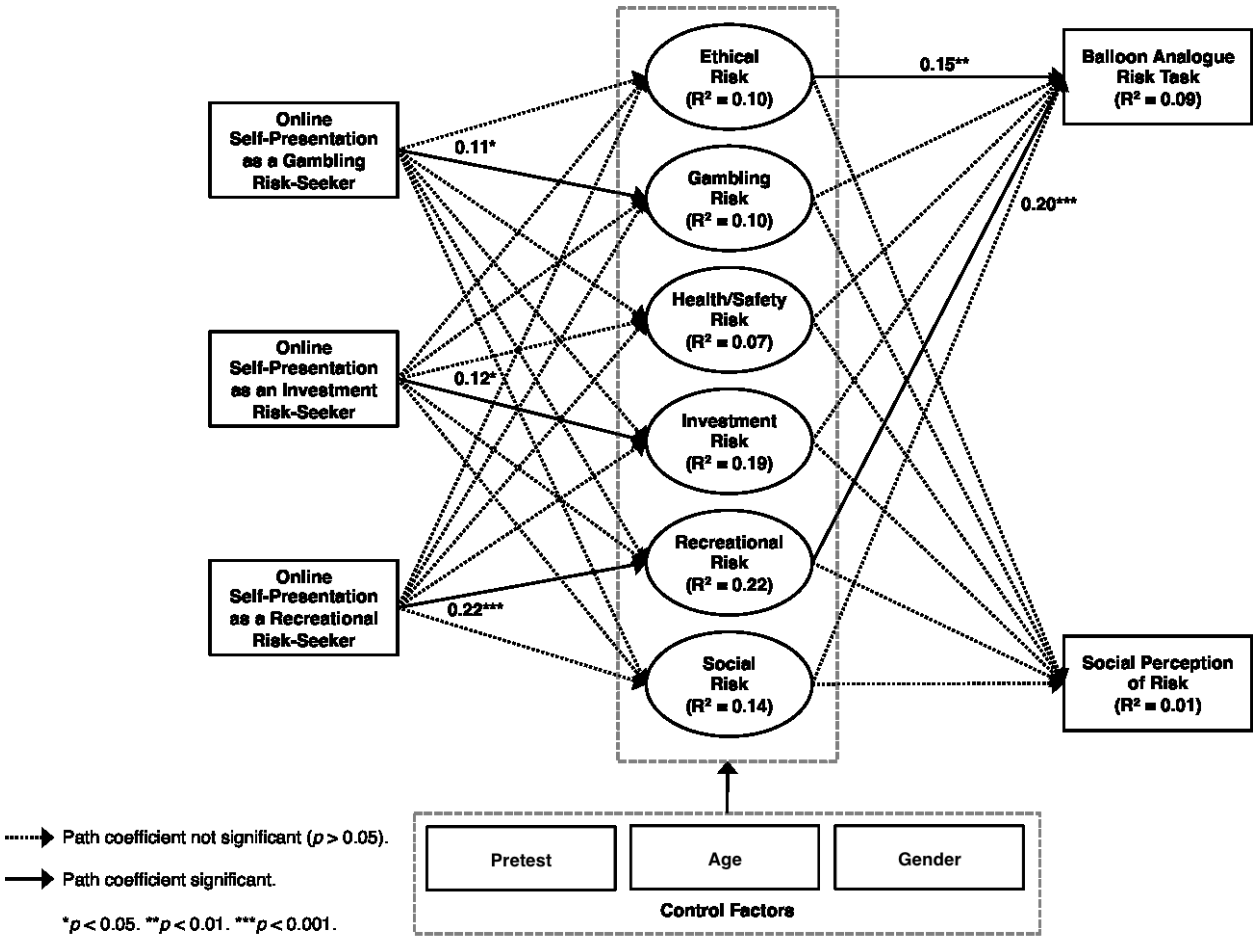

Figure 3. Results of Post-hoc PLS Regression Analysis for Experiment 1

Because the dummy variables were entered in the model in addition to the control variables, their path coefficients can be interpreted as mean differences in domain-specific risk self-concepts after accounting for differences due to gender, age, and pretest general risk self-concept. An analysis of the path coefficients reveals that the content of participants' online self-presentations is indeed related to participants' domain-specific risk self-concept. Specifically, participants who presented themselves online as an investment risk-seeker subsequently rated themselves as more investment risk-seeking than all other study participants ($\beta = 0.12$, $t = 2.37$, $p < 0.05$). Similarly, participants who presented themselves online as a gambling risk-seeker subsequently rated themselves as more gambling risk-seeking than all other study participants (β

= 0.11, $t = 2.22$, $p < 0.05$). Lastly, participants who presented themselves online as a recreational risk seeker subsequently rated themselves as more recreational risk-seeking than all other study participants ($\beta = 0.22$, $t = 4.82$, $p < 0.001$). Given the highly significant relationship between online self-presentation as a recreational risk-seeker and recreational risk self-concept, I further analyzed the content of the 94 responses that were categorized as pertaining to recreational risk. Interestingly, among those 43 (46%) specifically mentioned skydiving.

Discussion

The results of Experiment 1 provide initial support for the hypothesis that online self-presentation changes the self-concept in the same direction (H1). Specifically, participants who presented themselves online as a risk-seeker subsequently rated themselves as more investment risk-seeking than participants who did not present themselves online. However, the observed change in the self-concept was confined to the domain of investment risk. Several explanations could account for this finding. First, it might be the case that the investment risk self-concept is particularly malleable to online self-presentation. Given that my sample consists exclusively of undergraduate students, it is possible that this domain of the self-concept less clearly defined than other risk domains of the self-concept. Second, the self-report measures of the domain-specific risk self-concepts might not be sensitive enough to detect changes in other domains of the risk self-concept. Thus, participants might have exhibited changes in other risk domains, but the measures failed to capture that change. Additional indicators of the various domains of risk coupled with a larger sample size could help alleviate this shortcoming. Third, the domain-specific risk self-concept measures might not assess what they attempt to assess. Recall that the domain-specific risk self-concept measures ask for participants' likelihood to engage in a certain activity if they were to find themselves in that situation. I adopted that measure as an indicator of

self-concept because it captures the extent to which one views oneself as the kind of person who would engage in a certain risky activity. Note that the domain-specific risk self-concept measures do not aim to capture behavioral intentions. However, it is possible that participants understood the questions as a measure of behavioral intention – i.e. how likely they are to engage in a certain activity. If that was the case, then the domain-specific self-concept measures were in fact measures of behavioral intention, which would explain the non-significant findings in the majority of risk domains.

Results of the post-hoc analysis lend additional support to H1. Specifically, the post-hoc analysis suggests that the content of one's online self-presentation is significantly related to one's domain-specific risk self-concept. Participants who presented themselves as investment, gambling, or recreational risk-seekers subsequently rated themselves more investment, gambling, or recreational risk-seeking than all other participants. These relationships are significant even after accounting for differences due to gender, age, and general risk self-concept. However, since participants were not randomly assigned to present themselves online as a domain-specific risk-seeker (e.g. as a recreational risk-seeker), but freely chose to present themselves as any kind of risk-seeker, one cannot infer that online self-presentation caused the differences in domain-specific risk self-concept. After all, it is just as likely that participants who were e.g. recreational risk-seekers simply chose to present themselves as such. Thus, the promising results of the post-hoc analysis need to be further investigated.

The hypothesis that self-concept is positively related with associated behavior (H2) is supported by the results of the first experiment. I found that both ethical risk self-concept and recreational risk self-concept are positively related with performance on the BART. The finding that other domains of the risk self-concept, specifically gambling risk self-concept, are not

significantly related to BART is surprising. However, the fact that participants completed the BART without any kind of monetary reward might explain why it was not related to gambling risk self-concept. It would be interesting to investigate how the introduction of monetary rewards alters the relationships between BART and the domain-specific risk self-concepts.

The non-significant finding regarding the relationship between self-concept and social perception (H3) might be due to the measure of social perception not being sensitive enough to changes in domain-specific risk self-concepts. Given that the measure of social perception assesses participants' overall perception of a person engaging in a variety of relatively risk neutral activities (albeit covering several domains of risk), it might be the case that changes in one particular domain of risk are not strong enough to affect the overall social perception of risk. Thus, a more focused, domain-specific social perception measure might have captured domain-specific changes in the risk self-concept.

The lack of empirical support for the moderating effects of visibility, identifiability, and restrictiveness on the relationship between online self-presentation and self-concept (H4-6) might be partially attributed to the conditional nature of the main effect. Given that participants only exhibited changes pertaining to specific domains of their individual risk self-concepts, any potential interactions with system factors might have been too subtle to be measured at an adequate level of statistical significance. Although the manipulations successfully produced the psychological states of perceived visibility, identifiability, and restrictiveness – as measured by the manipulation checks – it is possible that the manipulations were not strong enough to create a significant interaction and ultimately impact the domain-specific risk self-concept measures. Furthermore, the potential problems with the measurement of the domain-specific risk self-concepts (as discussed above) could have amplified the lack of significant findings.

Lastly, Experiment 1 does not provide support for the hypothesis that self-monitoring moderates the impact of online self-presentation on the self-concept (H9). Again, it is possible that the domain-specific nature of the main effect negatively impacted my ability to detect a statistically significant interaction. Although it is possible to have no main effect but a significant interaction (Hair et al., 2009), this is not the case here. Additional problems might stem from the way self-monitoring is measured. There is a long-standing debate in the field of psychology regarding the measure of self-monitoring (Briggs, Cheek, & Buss, 1980; Gabrenya & Arkin, 1980). Numerous studies have questioned the uni-dimensional nature of the self-monitoring construct and instead proposed that self-monitoring is in fact multidimensional and covers such factors as acting, extraversion, and other-directedness (see Briggs & Cheek, 1986; Gangestad & Snyder, 1985; Hosch & Marchioni, 1986; Lennox & Wolfe, 1984; Nowack & Kammer, 1987; Riggio & Friedman, 1982; Snyder & Gangestad, 1986; Sparacino, Ronchi, Bigley, Flesch, & Kuhn, 1983). Thus, it is possible that certain sub-dimensions of self-monitoring might have interacted with the online self-presentation manipulation. Maybe future work on self-monitoring will develop more refined measures that can be used to evaluate this question.

Given the mixed findings of Experiment 1, I decided to conduct a follow-up experiment (Experiment 2) changing the online self-presentation manipulation and social perception measure. The post-hoc analysis of Experiment 1 reveals that a large amount of participants chose to present themselves as recreational risk-seekers by writing about a skydiving experience. Thus, in Experiment 2, I asked participants to present themselves online as recreational risk-seekers by writing about an imaginary skydiving experience. I reasoned that presenting oneself as someone who engages in skydiving should alter one's recreational risk self-concept. I also changed the social perception measure to focus on recreational risk as exhibited by skydiving.

Experiment 2

Methods

Overview

The purpose, design, and procedure of Experiment 2 are identical to Experiment 1, except for the manipulation of online self-presentation and the measure of social perception.

Participants

Three hundred seventy two participants, who were students at a large urban, Northeastern American university, participated in exchange for partial course credit (worth 2.50% of the final grade) as part of a departmental subject pool. I removed 93 (25.00%) participants because they did not follow the study instructions. Specifically, 68 (18.28%) participants did not write anything on the blog, 20 (5.28%) participants did not complete all dependent measures, and five (1.34%) participants clearly did not write about the assigned topic. In order to test if the participants I removed were randomly distributed across the experimental groups, I conducted independent sample *t*-tests for each independent variable using dummy variables for participants (coded "1" if removed and "0" otherwise). Results indicate that participants who did not follow the study instructions were more likely to be assigned to the identified condition ($M = 63.44\%$) than regular participants ($M = 45.16\%$) ($t(370) = 2.46$, $p < 0.05$). Thus, the pattern of missing data is non-random and any conclusions drawn from the data analysis must be interpreted in light of this finding. My final sample size consisted of 279 usable responses. Fifty-four percent of the participants were male and participants' mean age was 22 years ($SD = 4.19$). The numbers of participants in each group are shown in Table 8.

Table 8. Number of Participants per Group in Experiment 2

Group (*n*)									
1	2	3	4	5	6	7	8	9	Total (*N*)
31	33	31	30	31	31	31	32	29	279

Procedure

In contrast to Experiment 1, online self-presentation was manipulated by having participants write about an imaginary skydiving experience on an experimental website called Skydiving.com. Participants were led to believe that Skydiving.com has about 10,000 visitors per month and that it is one of the most popular skydiving sites on the web. Moreover, participants were told that "Skydiving.com is currently developing a new marketing campaign to encourage more people to try skydiving" and that participants are asked to help with the campaign by writing about an imagined skydiving jump on Skydiving.com. Participants were given the goal "to convince others to also try skydiving." Unbeknown to the participants was the fact that the experimental website was created by the researchers for the purpose of this study. To increase realism, the Skydiving.com website was pre-populated with a comments, supposedly written by other study participants, which talked about how they enjoyed their skydiving experience. The detailed experimental instructions, including the confederate responses, are provided in Appendix C. Visibility, identifiability, and restrictiveness were manipulated similarly to Experiment 1.

After completing the online self-presentation task on the Skydiving.com website, participants returned to the online survey where they completed all dependent measures in random order. Social perception of risk was measured by asking participants to carefully read a

description of a fictitious person, Jack, and subsequently rate how they view Jack ("I view Jack as a…") on a scale from 0 ("Risk Avoider") to 100 ("Risk Seeker"). Compared to Experiment 1, the description of Jack was altered to reflect the focus on recreational risk in general, and skydiving in particular. Participants read the following description of Jack:

> *Jack is 21 years old and an undergraduate student in business at a public university in the Northeastern United States. In his free time, he likes to go skydiving. He did his first tandem skydive, in Long Island, when he was 18 years old. Since then, Jack has completed over 25 jumps. Last month, Jack received his skydiving license from the United States Parachuting Association (USPA), which allows him to jump without supervision and pack his own parachute. He plans to complete another 10 jumps before the end of this year.*

Lastly, I made a minor adjustment to the domain-specific risk self-concept measure. After receiving complaints from participants in Experiment 1 about two questions that probe rather intimate topics ("Having an affair with a married man/woman" and "Engaging in unprotected sex"), I decided to remove these questions from all following experiments.

Results

The PLS regression analysis, including the creation of dummy variables, followed the same steps for as described in Experiment 1.

Manipulation checks

To examine how far participants perceived that their response on Skydiving.com is public, they indicated their agreement with the statement "my response can be read by anyone visiting Skydiving.com" on a scale from 1 ("strongly disagree") to 7 ("strongly agree"). As predicted, participants in the public condition perceived their response to be more public (M =

5.57, SD = 1.77) than participants in the private condition (M = 4.61, SD = 2.16, $t(248) = 3.85$, $p < .001$). To determine the degree to which participants perceived that their response on Skydiving.com is identified, they indicated their agreement with the statement "my response on Skydiving.com is anonymous" on a scale from 1 ("strongly disagree") to 7 ("strongly agree"). As predicted, participants in the identified condition perceived their response to be less anonymous (M = 3.31, SD = 2.28) than participants in the anonymous condition (M = 5.64, SD = 1.69, $t(248) = 9.14$, $p < .001$) To determine if participants perceived that the Skydiving.com website restricted their ability to write a response, they indicated their agreement with the statement "the Skydiving.com website restricted my ability to write a long response" on a scale from 1 ("strongly disagree") to 7 ("strongly agree"). As predicted, participants in the unrestricted condition perceived the website to be less restrictive (M = 2.20, SD = 1.51) than participants in the restricted condition (M = 4.97, SD = 2.27, $t(248) = 11.33$, $p < .001$). Furthermore, participants in the unrestricted condition wrote longer responses (M = 505.93 characters, SD = 282.29) on Skydiving.com than participants in the restricted condition (M = 132.68 characters, SD = 43.67, $t(248) = 14.66$, $p < 0.001$). However, a comparison of the time spent (in minutes) to complete Experiment 2 revealed no significant difference between participants in the restricted and unrestricted conditions (M_{rest} = 16.85, SD_{rest} = 5.72, M_{unrest} = 18.28, SD_{unrest} = 6.28, $t(248) = 1.84$, $p = 0.07$).

Measurement model

To evaluate the measurement model, I compared item loadings and cross-loadings, average variance extracted (AVE), as well as composite reliability for all latent constructs with the guidelines suggested by Gefen and Straub (2005). After an initial review of the measurement model, I removed the following items because of relatively low factor loadings (< 0.50) and high

cross-loadings (> 0.30): two items related to ethical risk self-concept (i.e. “Revealing a friend's secret to someone else,” “Not returning a wallet you found that contains $200”), three items related to health/safety risk self-concept (i.e. “Drinking heavily at a social function,” “Driving a car without wearing a seat belt,” “Riding a motorcycle without a helmet”), one item related to recreational risk self-concept (i.e. “Going down a ski run that is beyond your ability”), and three items related to social risk self-concept (i.e. “Choosing a career that you truly enjoy over a more secure one,” “Moving to a city far away from your extended family,” “Starting a new career in your mid-thirties”). Similar to my reasoning in Experiment 1, I believe that the undergraduate student sample in my study could not relate well to the majority of these questions. Appendix D provides an overview of all items included in this experiment, as well as their construct loadings.

After removing these items, all latent constructs exhibit adequate convergent and discriminant validity as well as reliability. Table 9 displays the construct reliabilities and inter-construct correlations. As can be seen in Table 9, all items load significantly on their theoretically assigned constructs, which establishes convergent validity (Gefen & Straub, 2005). Moreover, all item loadings on their respective constructs are an order of magnitude larger (> 0.10) than any other loading. Moreover, the square root of every AVE (displayed on the diagonal in Table 9) is larger than 0.50 as well as larger than any correlation among any pair of latent constructs. Following the recommendations by Gefen and Straub (2005), I conclude that the constructs exhibit adequate discriminant validity in order to continue with the PLS regression analysis. Finally, the reliability measures for all latent constructs (also shown in Table 9) are larger than the suggested cut-off of 0.70 (Straub, Boudreau, & Gefen, 2004).

Table 9. Construct Reliabilities and Inter-Construct Correlations for Experiment 2

	Construct	Reliability	1	2	3	4	5	6	7	8
1.	Age	n/a[a]	**1.00**							
2.	BART	n/a[a]	-0.01	**1.00**						
3.	Pretest[b]	n/a[a]	0.08	0.02	**1.00**					
4.	ETH	0.78	-0.13	0.03	0.15	**0.74**				
5.	GAM	0.91	0.03	0.11	0.24	0.36	**0.87**			
6.	HS	0.74	-0.12	0.14	0.29	0.27	0.32	**0.77**		
7.	INV	0.83	0.15	0.10	0.25	0.22	0.30	0.21	**0.79**	
8.	REC	0.85	-0.09	0.09	0.37	0.22	0.25	0.44	0.23	**0.73**
9.	SOC	0.83	-0.07	0.15	0.23	0.12	0.12	0.34	0.22	0.32
10.	Gender	n/a[a]	0.05	-0.14	-0.18	-0.17	-0.25	-0.24	-0.16	-0.12
11.	SM	n/a[a]	-0.06	0.04	0.19	0.06	0.11	0.15	0.14	0.13
12.	SP	n/a[a]	0.10	0.01	0.02	-0.18	-0.13	-0.13	-0.01	-0.16
13.	OSP	n/a[a]	0.03	0.06	0.09	-0.08	0.01	0.00	-0.02	0.04
14.	IDEN	n/a[a]	0.05	0.02	0.00	0.01	-0.09	0.03	0.02	0.01
15.	VISI	n/a[a]	0.09	0.04	-0.03	0.02	0.00	0.01	0.04	0.01
16.	REST	n/a[a]	-0.11	0.04	-0.06	0.12	0.03	0.11	0.00	0.06

Table 9. (continued)

Construct	Reliability	9	10	11	12	13	14	15	16
9. SOC	0.83	**0.79**							
10. Gender	n/a[a]	-0.13	**1.00**						
11. SM	n/a[a]	0.15	-0.23	**1.00**					
12. SP	n/a[a]	0.02	0.15	-0.08	**1.00**				
13. OSP	n/a[a]	0.09	0.03	-0.09	0.05	**1.00**			
14. IDEN	n/a[a]	-0.03	0.01	0.01	0.00	0.00	**1.00**		
15. VISI	n/a[a]	-0.05	-0.03	-0.03	-0.18	0.00	0.02	**1.00**	
16. REST	n/a[a]	-0.02	-0.08	0.05	-0.04	0.00	-0.01	0.00	**1.00**

Note: $N = 279$. Bold-faced number on diagonal is the square root of average variance extracted. [a] Reliability not calculated because construct consists of a single indicator. [b] Pretest measure of general risk self-concept. BART = Balloon Analogue Risk Task, ETH = Ethical Risk, GAM = Gambling Risk, HS = Health/Safety Risk, INV = Investment Risk, REC = Recreational Risk, SOC = Social Risk, SM = Self-Monitoring, OSP = Online Self-Presentation, IDEN = Identifiability, VISI = Visibility, REST = Restrictiveness.

Structural model

Figure 4 depicts the results of the PLS regression analysis. Equivalent to Experiment 1, the model assesses all hypothesized relationships simultaneously.

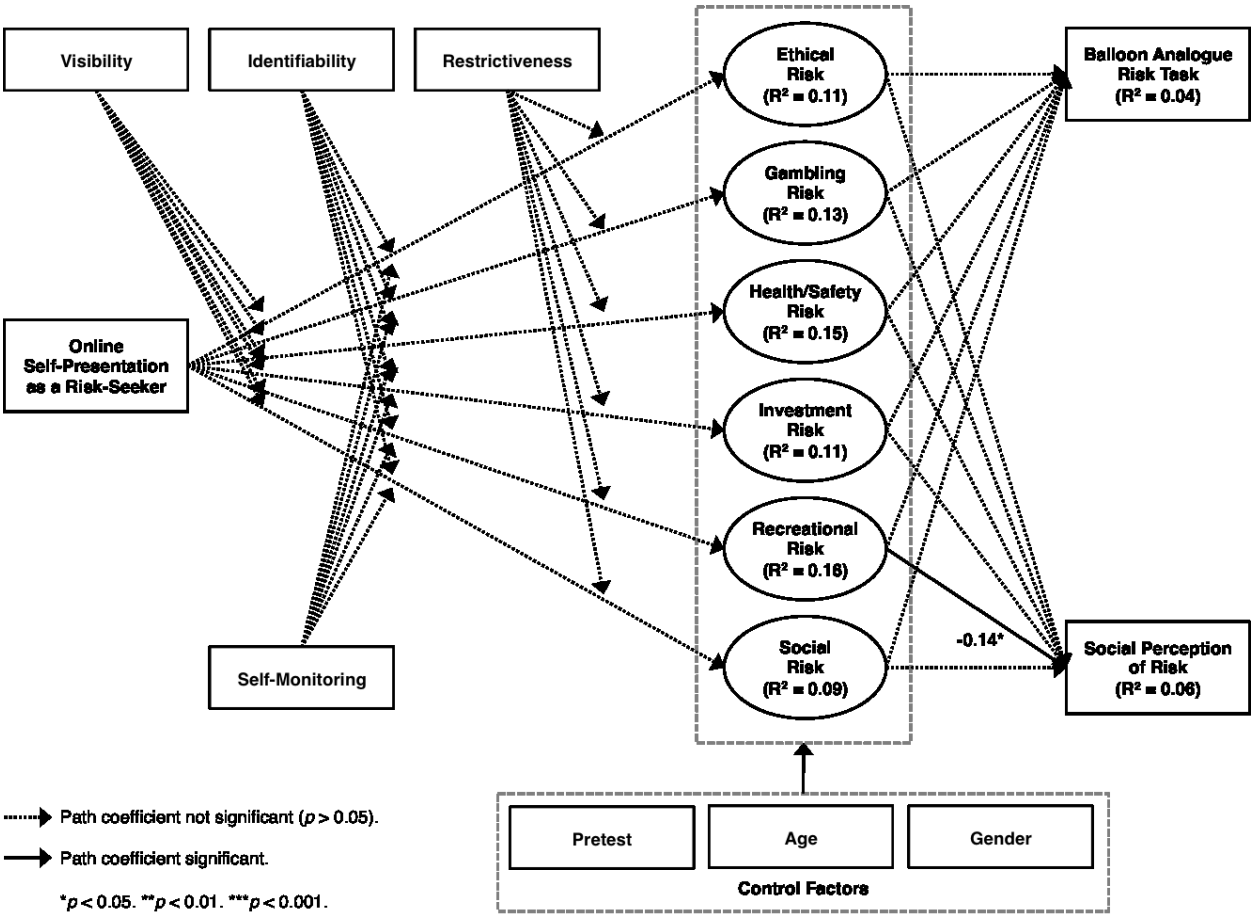

Figure 4: Results of PLS Regression Analysis for Experiment 2

Detailed results of all paths from the independent variables to the domain-specific risk self-concept constructs are presented in Table 10. As in Experiment 1, age is again negatively related to ethical risk self-concept (β = -0.12, $t(499) = 2.00$, $p < 0.05$). Thus, participants who are older rated themselves as less risk seeking with regards to ethical risk than participants who are younger. In addition, age is also positively related to investment risk self-concept ($\beta = 0.14$, $t(499) = 2.46$, $p < 0.05$). Participants who are older rated themselves as more investment risk-

seeking than participants who are younger. None of the other relationships between age and domain-specific risk self-concepts are significant ($p > 0.10$). Gender (coded "0" for male and "1" for female) is negatively related to ethical risk self-concept ($\beta = -0.14$, $t(499) = 2.28$, $p < 0.05$), gambling risk self-concept ($\beta = -0.21$, $t(499) = 3.52$, $p < 0.001$), and health/safety risk self-concept ($\beta = -0.16$, $t(499) = 2.57$, $p < 0.01$). Thus, female participants rated themselves as less risk-seeking with regards to ethical, gambling, and investment risk than male participants. In contrast, gender is not significantly related to investment, recreational, or social risk self-concepts ($p > 0.10$). Lastly, the pretest general risk self-concept measure is positively related to all domain-specific risk self-concepts, including ethical risk self-concept ($\beta = 0.15$, $t(499) = 2.45$, $p < 0.05$), gambling risk self-concept ($\beta = 0.19$, $t(499) = 3.06$, $p < 0.01$), health/safety risk self-concept ($\beta = 0.26$, $t(499) = 4.22$, $p < 0.001$), investment risk self-concept ($\beta = 0.20$, $t(499) = 3.11$, $p < 0.01$), recreational risk self-concept ($\beta = 0.37$, $t(499) = 5.88$, $p < 0.001$), and social risk self-concept ($\beta = 0.19$, $t(499) = 2.88$, $p < 0.01$). In other words, participants who rated themselves as more risk-seeking in general at the beginning of the experiment also rated themselves as more risk-seeking in all specific domains of risk at the end of the experiment.

Table 10. Select PLS Regression Path Coefficients for Experiment 2

	Dependent Variable					
Independent Variable	ETH	GAM	HS	INV	REC	SOC
Age	-0.12*	0.04	-0.11	0.14*	-0.11	-0.08
Pretest[a]	0.15*	0.19**	0.26***	0.20**	0.37***	0.19**
Gender	-0.14*	-0.21***	-0.16**	-0.11	-0.03	-0.07
SM	0.62	0.48	0.33	0.32	0.06	0.28
OSP	-0.03	0.03	0.01	-0.01	0.01	0.10
OSP × SM	-0.66	-0.25	-0.47	-0.28	-0.02	-0.19
IDEN	0.02	-0.09	0.04	0.01	0.02	-0.02
VISI	0.03	0.00	0.02	0.03	0.03	-0.04
REST	0.11	0.03	0.09	0.01	0.07	-0.03
R^2	0.11	0.13	0.15	0.11	0.16	0.09

Note: $N = 279$. All path coefficients are standardized. Statistical significance is evaluated based on bootstrapping with 500 resamples. [a] Pretest measure of general risk self-concept. ETH = Ethical Risk, GAM = Gambling Risk, HS = Health/Safety Risk, INV = Investment Risk, REC = Recreational Risk, SOC = Social Risk, SM = Self-Monitoring, OSP = Online Self-Presentation, IDEN = Identifiability, VISI = Visibility, REST = Restrictiveness.

*$p < .05$. **$p < .01$. ***$p < .001$.

To test H1, the impact of online self-presentation on the self-concept, I evaluated the statistical significances associated with the six path coefficients from the online self-presentation dummy variable (labeled "OSP") to the domain-specific risk self-concept constructs. Identical to Experiment 1, the significances associated with the path coefficients represent six tests of the

null hypothesis that the means of the constructs do not differ between the treatment and control groups. None of the paths are significantly different from zero ($p > 0.10$). This suggests that participants in the treatment groups do not systematically differ from the control group with regards to their posttest domain-specific risk self-concepts, after controlling for gender, age, and pretest general risk self-concept. Thus, H1 is not supported. To test H2, the relationship between self-concept and behavior, I examined the significances associated with the six path coefficients from domain-specific risk self-concept to BART. None of the six path coefficients are significantly different from zero ($p > 0.10$). This suggests that neither of the domain-specific risk self-concepts is related to performance on the BART. Thus, H2 is not supported. To test H3, the negative relationship between self-concept and associated social perception, I evaluated the six paths between the domain-specific risk self-concept constructs and social perception of risk. As predicted, the path coefficient from recreational risk self-concept to social perception is negative and significant ($\beta = -0.14$, $t(499) = 2.01$, $p < 0.05$). Thus, participants who are more recreational risk-seeking perceive someone else to be less recreational risk-seeking than participants who are less recreational risk-seeking. None of the other domain-specific risk self-concepts are significantly related to social perception ($p > 0.10$). Given that the measure of social perception was specifically altered to capture recreational risk, it is not surprising that none of the other risk self-concepts are related to it. Therefore, H3 is supported. To test H4, H5 and H6, the moderating roles of visibility, identifiability, and restrictiveness, I assessed the statistical significance associated with the paths from the respective dummy variables to the posttest domain-specific risk self-concept constructs. None of the hypothesized paths reached commonly accepted significance levels ($p > 0.10$). Thus, H4, H5, and H6 are not supported. Lastly, to test H9, the moderating role of self-monitoring, I analyzed the significance of the six paths from the

interaction of self-monitoring and online self-presentation to the domain-specific risk self-concept constructs. Again, none of the hypothesized paths reached significance ($p > 0.10$). Thus H9 is not supported. Table 11 provides a summary of all hypothesis tests for Experiment 2.

Table 11. Results of Hypotheses Tests for Experiment 2

Hypothesis (Main Variable)	Result
H1 (Online Self-Presentation)	Not supported
H2 (Behavior)	Not supported
H3 (Social Perception)	Supported
H4 (Visibility)	Not supported
H5 (Identifiability)	Not supported
H6 (Restrictiveness)	Not supported
H7 (Online Community Size)	--[a]
H8 (Online Community Importance)	--[a]
H9 (Self-Monitoring)	Not supported
H10 (Self-Concept Clarity)	--[a]

Note: [a] Hypothesis not tested in this Experiment.

Discussion

The results of Experiment 2 suggest that writing about an imaginary skydiving experience online does not affect one's domain-specific risk self-concept, which I interpret as not lending support to H1. However, recall that I defined online self-presentation as the goal-directed activity of publishing information on the Internet in order to influence the impressions formed by an online community about oneself. Also note that I asked participants to influence the

impressions formed by an online community about skydiving – not about themselves. Thus, strictly speaking, one could argue that participants in Experiment 2 did not actually engage in online self-presentation. Participants instead managed the impressions of skydiving as a recreational activity. This would explain the non-significant finding for H1. In addition, it is possible that all participants, including those in the control group, exhibited domain-specific changes in their risk self-concept. It is possible that the mere act of trying to imagine oneself as skydiving activates related cognitions about risky activities, which subsequently affects related domain-specific risk self-concepts. The additional activity of writing about that experience, which participants in the treatment groups underwent, might simply not have been strong enough to activate additional cognitions in the participants' memory. This would also explain why there is no difference between participants in the control group and the treatment groups.

Furthermore, the results of Experiment 2 do not support the hypothesis that self-concept is related to behavior (H2). This result is surprising, given that Experiment 1 found support for H2. Although, the two samples of undergraduate students in Experiment 1 and Experiment 2 should be very similar, it is important to note that I had to discard 25.00% of the data in Experiment 2 due to participants not following the instructions. This is more than twice the amount of Experiment 1 (12.32%) and severely impacts my ability to derive meaningful conclusions from this experiment. Moreover, participants were significantly more likely not to follow the study instructions in the identified condition. It is possible that asking participants to lie about an experience online – especially while being identified – might have irritated them to such an extent that their self-report and behavioral measures were distorted. Alternatively, it is also possible that asking participants to lie during their online self-presentation made them also

respond untruthfully in the self-report and/or behavioral measures. This would explain why I did not find support for H2 in Experiment 2.

Experiment 2 provides support for the hypothesis that self-concept is negatively related to social perception. Whereas the description of the fictitious person upon which the measure of social perception is based was very general in Experiment 1, I created a domain-specific description focusing on recreational risk (specifically skydiving) for Experiment 2. This result is encouraging and suggests that social perception is indeed influenced by the self-concept. Specifically, this finding supports the theory that the self-concept serves as a reference point from which others are judged. However, Experiment 2 also suggests that the relationship between the self-concept and social perception is domain-specific. Thus, one's perception of others is uniquely influenced by one's domain-specific view of oneself. The fact that the other domain-specific risk self-concepts are not related to recreational social perception further supports the domain-specific interpretation of the negative relationship between self-concept and social perception.

Experiment 2 does not support the hypothesis that visibility moderates the relationship between online self-presentation and self-concept (H4). However, it is possible that participants in the private condition perceived their responses to be too public in order to create a significant impact on the self-concept. Although the manipulation check for visibility found a significant difference in perceived visibility between the public and private conditions, it is important to note that participants in the private condition still perceived their responses to be relatively visible ($M = 4.61$, on a scale from 1-7). In comparison, participants in the public condition perceived their responses to be only marginally more public ($M = 5.57$, $\Delta M = 0.91$). The online self-presentation manipulation informed participants in the private condition that their responses

would be visible to the researchers and the marketing team at Skydiving.com. In contrast, participants in the public condition were informed that their responses would be visible to anyone on the web, including the researchers, marketing team, and anyone of the 10,000 monthly visitors to Skydiving.com. It is possible that the additional audience of 10,000 monthly visitors was not enough to create a meaningful difference in perceived visibility to subsequently affect domain-specific risk self-concepts.

The hypothesis that identifiability moderates the impact of online self-presentation on the self-concept (H5) is also not supported by Experiment 2. In hindsight, it is possible that this finding is due to a general feeling of being anonymous among the participants in both Experiments 1 and 2. Despite the fact that the manipulation check for anonymity found a significant difference between participants in the identified and anonymous conditions, it is important to note that participants in the identified condition still felt relatively anonymous (M = 3.31, on a scale from 1-7). Although participants in the anonymous condition felt more anonymous (M = 5.64, ΔM = 2.23), I still believe that the lack of identifiability in the identified condition contributed to this non-significant finding in Experiment 2. Moreover, as discussed above, it is possible that participants felt generally uneasy about lying while being identified. This could have further distorted the moderating role of identifiability.

Contrary to H6, I did not find that restrictiveness moderates the impact of online self-presentation on the self-concept. Although the manipulation check confirmed that participants in the restricted condition felt more restricted in their ability to write a long response than participants in the unrestricted condition, I theorized that restrictiveness moderates the impact of online self-presentation on the self-concept because it influences the psychological ownership of one's online self-presentation. Specifically, I suggested that restrictiveness influences

psychological ownership because participants in the restricted condition have less control over their online self-presentation and also spend less effort creating their online self-presentation than participants in the unrestricted condition. However, my findings suggest that participants in the unrestricted condition did not spend significantly more time completing the experiment than participants in the restricted condition. Thus, it is possible that participants in the unrestricted condition did not put more effort into creating their online self-presentation – measured by time spent – and thus did not perceive greater psychological ownership over their online self-presentation than participants in the restricted condition. This would explain the insignificant finding with regards to restrictiveness in Experiment 2.

Lastly, Experiment 2 did not find support for the moderating role of self-monitoring (H9). Similar to Experiment 1, it is possible that the multidimensional nature of the self-monitoring construct severely hindered my ability to detect a moderating effect. Moreover, given the questionable nature of the online self-presentation manipulation in Experiment 2, it might have been the case that self-monitoring does not operate when participants are asked to lie or write about an imaginary experience.

In order to address the mixed results and shortcomings of Experiment 2, particularly with regards to the online self-presentation manipulation, I decided to conduct a follow-up experiment (Experiment 3), which combines the lessons learned from Experiments 1 and 2. Particularly, I decided to have participants write about a real experience (similar to Experiment 1), but limited to "outdoor sport activities" (similar to Experiment 2). Thus, in Experiment 3 participants were free to write about the most dangerous thing they have ever done – as long as it is an outdoor sport activity. I theorized that the increased realism found in Experiment 1 combined with the focus on recreational risk found in Experiment 2 should result in a strong main effect of online

self-presentation on recreational risk self-concept in Experiment 3. In addition, I decided to manipulate online community size, measure online community importance, and measure self-concept clarity in order to test the full research model as depicted in Figure 1. Lastly, I decided to broaden the sample, and thus increase the generalizability of the findings, by recruiting participants through Amazon Mechanical Turk. Because researchers recruiting participants through Amazon Mechanical Turk are not allowed to collect any type of personally identifiable information, I had to drop the identifiability manipulation from Experiment 3.

Experiment 3

Methods

Overview

The purpose and procedure of Experiment 3 were identical to Experiment 1, except for the manipulation of online self-presentation, the manipulation of online community size, the measure of online community importance, and the measure of self-concept clarity. Experiment 3 is a 2 (visibility: public vs. private) × 2 (restrictiveness: unrestricted vs. restricted) × 2 (online community size: large vs. small) incomplete factorial design, since online community size was not manipulated for participants in the private condition. Table 12 shows the experimental groups and their respective treatment configurations.

Table 12. Treatment Conditions in Experiment 3

	Manipulated Variable		
Group	Visibility	Online Community Size	Restrictiveness
1	Public	Large	Unrestricted
2	Public	Large	Restricted
3	Public	Small	Unrestricted
4	Public	Small	Restricted
5	Private	n/a[a]	Unrestricted
6	Private	n/a[a]	Restricted
7	Control (No Online Self-Presentation)		

Note: [a] Participants in the private visibility condition were not exposed to an online community.

Participants

Three hundred sixty four participants participated in the Experiment in exchange for a $0.50 payment each. I removed 79 (21.70%) participants, because they did not follow the study instructions. Specifically, 36 (9.89%) participants did not write anything on the website, 22 (6.04%) participants clearly did not write about the assigned topic, and 22 (6.04%) participants did not complete all dependent measures. Consequently, I was left with 284 usable responses. Testing for systematic patterns of removed participants, I found that removed participants were equally likely to be among any of the treatment conditions ($p > 0.10$). Thus, the removed participants can be considered missing at random (Hair et al., 2009). The distribution of participants across experimental groups is depicted in Table 13.

Table 13. Number of Participants in Experiment 3

Group (*n*)							Total (*N*)
1	2	3	4	5	6	7	
39	41	37	31	42	40	54	284

The sample characteristics are summarized in Table 14. Note that the majority of participants were male and based in India.

Table 14. Sample Characteristics of Experiment 3

Characteristic		Number	Percentage
Age			
	18-24	104	36.62%
	25-29	72	25.35%
	30-39	69	24.30%
	40-49	18	6.34%
	50-59	12	4.23%
	60 and over	9	3.17%
Education			
	Some high school	2	0.70%
	High school diploma	54	19.01%
	2-year college degree	39	13.73%
	4-year college degree	117	41.20%

Table 14. (continued)

Characteristic		Number	Percentage
	Master degree	68	23.94%
	Doctorate degree	5	1.76%
Gender			
	Male	173	60.92%
	Female	111	39.08%
Location			
	India	151	53.17%
	USA/Canada	92	32.39%
	Europe	24	8.45%
	Other	17	5.99%

Note: $N = 284$. Location based on participant's Internet Protocol (IP) address.

Procedure

The procedure followed that of Experiment 1, unless noted otherwise. Online self-presentation was manipulated by having participants visit an experimental website, called Daredevils, where they were asked to write about the most daring and dangerous outdoor sport activity they have ever done. Participants were informed that the researchers are interested in "understanding how well you can present yourself as a daredevil." They were also told to "feel free to exaggerate, but don't be outrageous, silly, or clearly untruthful." They were given the explicit goal "to convince others that you truly are a daredevil." Again unbeknown to the participants was the fact that the experimental website was created by the researchers for the

purpose of this study. Furthermore, to increase realism, the Daredevils website was pre-populated with one comment, supposedly written by another study participant, which talked about how the person went heli-snowboarding while an avalanche warning was in effect. Detailed instructions for Experiment 3 are provided in Appendix E.

Visibility and restrictiveness were manipulated just like in Experiment 1. Online community size was manipulated by informing participants of the number of other study participants that can read their response on the Daredevils website. In the small online community size condition, participants were told that their "response can be read by anyone on the web, including the 50 other study participants." In contrast, in the large online community size condition, participants were told that their "response can be read by anyone on the web, including the 10,000 other study participants."

After completing the online self-presentation task on the Daredevils website, participants returned to the online survey where they completed all dependent measures in random order. The dependent measures were identical to Experiment 2. In addition, participants completed the self-concept clarity scale (Campbell et al., 1996), which consists of 12 items measured on a scale from 1 ("strongly disagree") to 7 ("strongly agree"). Lastly, I measured perceived online community importance by asking participants to indicate their agreement with the statement "I care about who reads my response on the Daredevils website" on a scale from 1 ("strongly disagree") to 7 ("strongly agree").

Results

The data analysis, including the creation of dummy variables, followed the same steps for PLS regression analysis as described in Experiment 1. Given that participants in Experiment 3 were located in 31 different countries, I categorized them into four different regions: North

America, Europe, India, and other (or rest of world). Subsequently, I created three additional dummy variables to control for potential differences in domain-specific risk self-concepts between North America and Europe (dummy labeled "EUROPE"), between North America and India (dummy labeled "INDIA"), and between North America and rest of world (dummy labeled "ROW"). Thus, North America serves as a reference group against which the other domain-specific self-concepts are compared. Furthermore, since Experiment 3 manipulated online community size, I created a dummy variable to capture the moderating effect of online community size on online self-presentation. The dummy variable for online community size is labeled "OCS" and coded "-1" for participants in the small online community size condition and "1" for participants in the large online community size condition. All remaining participants in the private and control conditions are coded "0." Thus, the dummy variable OCS contrasts participants in the small and large online community size conditions.

Manipulation checks

To test if participants perceived that their response on the Daredevils website is public, they indicated their agreement with the statement "my response on the Daredevils website can be read by anyone on the web" on a scale from 1 ("strongly disagree") to 7 ("strongly agree"). As predicted, participants in the public condition perceived their response to be more public (M = 5.76, SD = 1.60) than participants in the private condition (M = 2.56, SD = 2.07, $t(228) = 13.01$, $p < .001$). To evaluate if participants perceived differences in the online community size, they indicated their agreement with the statement "Many people will read my response on the Daredevils website" on a scale from 1 ("strongly disagree") to 7 ("strongly agree"). Contrary to expectations, participants in the large online community size condition did not perceive that more people will read their response (M = 5.29, SD = 1.56) than participants in the small online

community size condition (M = 5.40, SD = 1.37, $t(146) = 0.45$, $p = 0.65$). Although both groups equally perceived that many people will read their response on the Daredevils website, it is possible that the word "many" did not properly capture the difference in perceived online community size between the groups. Nevertheless, the manipulation check failed to show a significant difference in perceived online community size between the large and small online community size groups. To test if participants perceived that the Daredevils website restricted their ability to write a response, they indicated their agreement with the statement "the Daredevils website restricted my ability to write a long response" on a scale from 1 ("strongly disagree") to 7 ("strongly agree"). As predicted, participants in the unrestricted condition perceived the blog to be less restrictive (M = 2.71, SD = 1.78) than participants in the restricted condition (M = 4.83, SD = 2.01, $t(228) = 8.47$, $p < .001$). Furthermore, participants in the unrestricted condition wrote longer (measured in characters) responses (M = 551.04, SD = 529.49) than participants in the restricted condition (M = 136.15, SD = 28.69, $t(228) = 8.28$, $p < 0.001$). Interestingly, the longer response did not translate into participants spending more time (measured in minutes) completing the experiment in the unrestricted condition (M = 25.16, SD = 12.46) than in the restricted condition (M = 23.68, SD = 9.58, $t(228) = 1.01$, $p = 0.32$).

Measurement model

Just like in the first two experiments, I evaluated the measurement model by evaluating the item loadings and cross-loadings, average variance extracted (AVE), and composite reliability for all latent constructs (Gefen & Straub, 2005). Following an initial review of the measurement model, I removed the following items due to relatively low factor loadings (< 0.50) and high cross-loadings (> 0.30): one item related to ethical risk self-concept (i.e. "Taking some questionable deductions on your income tax return"), two items related to health/safety risk self-

concept (i.e. “Driving a car without wearing a seat belt,” “Riding a motorcycle without a helmet”), one item related to recreational risk self-concept (i.e. “Going down a ski run that is beyond your ability”), and three items related to social risk self-concept (i.e. “Disagreeing with an authority figure on a major issue,” “Choosing a career that you truly enjoy over a more secure one,” “Speaking your mind about an unpopular issue in a meeting at work”). Given that this experiment used a broader sample of adults from different countries, it is possible that some of the items did not capture the theoretically related risk constructs very well. For example, taking questionable deductions on an income tax return might not be perceived as an ethical risk across different cultures. Similarly, issues related to disagreeing with authority figures or speaking up at work might be perceived very differently across different cultures. A further exploration of the differences between domain-specific risk self-concepts across cultures is certainly interesting, but beyond the scope of this work. For the same reason of low factor loadings and high cross-loadings, I removed two items from the self-concept clarity scale (i.e. “I seldom experience conflict between the different aspects of my personality,” “In general, I have a clear sense of who I am and what I am”). In contrast to the remaining ten items of the self-concept clarity scale, these items are not reverse-coded, meaning stronger agreement indicates greater self-concept clarity. The remaining items in the scale are all reverse-coded, meaning stronger agreement indicates lesser self-concept clarity. It is possible that participants did not read these two items very well and subsequently answered not in line with their actual self-concept clarity. Thus, I removed these two items from the self-concept clarity scale. Appendix F shows the items and loadings for all latent constructs in Experiment 3.

After removing the above-mentioned items, all latent constructs exhibit adequate convergent and discriminant validity as well as reliability. As shown in Table 15, all items load

significantly on their theoretically assigned constructs. Moreover, all item loadings on their respective constructs are an order of magnitude larger (> 0.10) than any other loading. Furthermore, as can be seen in Table 15, the square root of every AVE is larger than 0.50 and also larger than any correlation among any pair of latent constructs. This leads me to conclude that the latent constructs in Experiment 3 exhibit adequate convergent and discriminant validity (Gefen & Straub, 2005). Finally, the reliability measures for all latent constructs (displayed in Table 15) are larger than the suggested cut-off of 0.70 (Straub, Boudreau, & Gefen, 2004).

Table 15. Construct Reliabilities and Inter-Construct Correlations for Experiment 3

	Construct	Reliability	1	2	3	4	5	6	7	8	9	10	11
1.	Age	n/a[a]	**1.00**										
2.	BART	n/a[a]	-0.14	**1.00**									
3.	Pretest[b]	n/a[a]	-0.03	0.05	**1.00**								
4.	ETH	0.81	-0.01	-0.02	0.32	**0.72**							
5.	GAM	0.93	0.08	-0.03	0.41	0.53	**0.91**						
6.	HS	0.78	-0.04	0.17	0.33	0.49	0.47	**0.74**					
7.	INV	0.88	0.07	-0.01	0.47	0.31	0.46	0.35	**0.84**				
8.	REC	0.87	-0.09	0.06	0.48	0.25	0.39	0.34	0.45	**0.75**			
9.	SOC	0.76	0.23	-0.01	0.15	-0.01	0.14	0.30	0.29	0.19	**0.72**		
10.	Gender	n/a[a]	0.07	-0.14	-0.14	-0.23	-0.20	-0.30	-0.21	-0.17	0.11	**1.00**	
11.	EUROPE	n/a[a]	-0.09	0.00	-0.17	-0.11	-0.06	0.00	-0.11	-0.05	-0.10	-0.09	**1.00**
12.	INDIA	n/a[a]	-0.08	-0.05	0.24	0.37	0.29	0.11	0.35	0.27	-0.14	-0.20	-0.32
13.	ROW	n/a[a]	0.10	-0.02	0.01	-0.01	-0.10	-0.15	-0.05	-0.09	-0.06	0.04	-0.08
14.	OCI	n/a[a]	0.06	-0.12	0.13	-0.01	0.05	-0.01	0.05	0.11	-0.13	0.05	-0.04
15.	SCC	0.92	0.16	-0.02	-0.24	-0.47	-0.30	-0.13	-0.11	-0.16	0.12	0.09	0.12
16.	SM	n/a[a]	-0.08	0.08	0.24	0.06	0.18	0.23	0.15	0.15	0.12	-0.12	-0.10
17.	SP	n/a[a]	0.06	0.03	0.09	-0.11	-0.03	-0.04	0.04	-0.02	0.25	0.04	-0.15
18.	OSP	n/a[a]	0.09	0.06	-0.06	-0.13	-0.07	-0.02	-0.08	0.08	-0.03	0.02	0.08
19.	OCS	n/a[a]	-0.10	-0.07	0.01	-0.01	0.04	0.00	0.01	0.06	0.13	0.01	-0.02
20.	VISI	n/a[a]	0.05	-0.07	0.10	-0.09	0.02	0.01	-0.05	0.04	0.04	0.09	-0.05
21.	REST	n/a[a]	0.02	0.08	-0.03	-0.06	-0.12	-0.08	-0.13	-0.08	-0.03	0.01	0.13

Table 15. (continued)

Construct	Reliability	12	13	14	15	16	17	18	19	20	21
12. INDIA	n/a[a]	**1.00**									
13. ROW	n/a[a]	-0.27	**1.00**								
14. OCI	n/a[a]	0.16	0.04	**1.00**							
15. SCC	0.92	-0.22	-0.02	0.02	**0.73**						
16. SM	n/a[a]	-0.07	0.07	0.06	-0.01	**1.00**					
17. SP	n/a[a]	-0.02	-0.04	0.02	0.05	-0.04	**1.00**				
18. OSP	n/a[a]	-0.08	-0.03	0.39	0.14	-0.04	0.01	**1.00**			
19. OCS	n/a[a]	-0.01	-0.06	0.00	-0.05	0.03	-0.03	0.03	**1.00**		
20. VISI	n/a[a]	0.01	0.05	0.71	0.12	0.09	0.09	0.13	0.05	**1.00**	
21. REST	n/a[a]	-0.12	-0.09	0.02	0.06	-0.03	-0.02	0.01	-0.04	0.00	**1.00**

Note: $N = 284$. Bold-faced number on diagonal is the square root of average variance extracted. [a] Reliability not calculated because construct consists of a single indicator. [b] Pretest measure of general risk self-concept. BART = Balloon Analogue Risk Task, ETH = Ethical Risk, GAM = Gambling Risk, HS = Health/Safety Risk, INV = Investment Risk, REC = Recreational Risk, SOC = Social Risk, EUROPE = Participants based in Europe, INDIA = Participants based in India, ROW = Participants based in other countries, OCI = Online Community Importance, SCC = Self-Concept Clarity, SM = Self-Monitoring, OSP = Online Self-Presentation, OCS = Online Community Size, IDEN = Identifiability, VISI = Visibility, REST = Restrictiveness.

Structural model

Results of the PLS path analysis for Experiment 3 are shown in Figure 5. As in the previous experiments, I tested the full model, which allows me to test all hypothesized relationships at once.

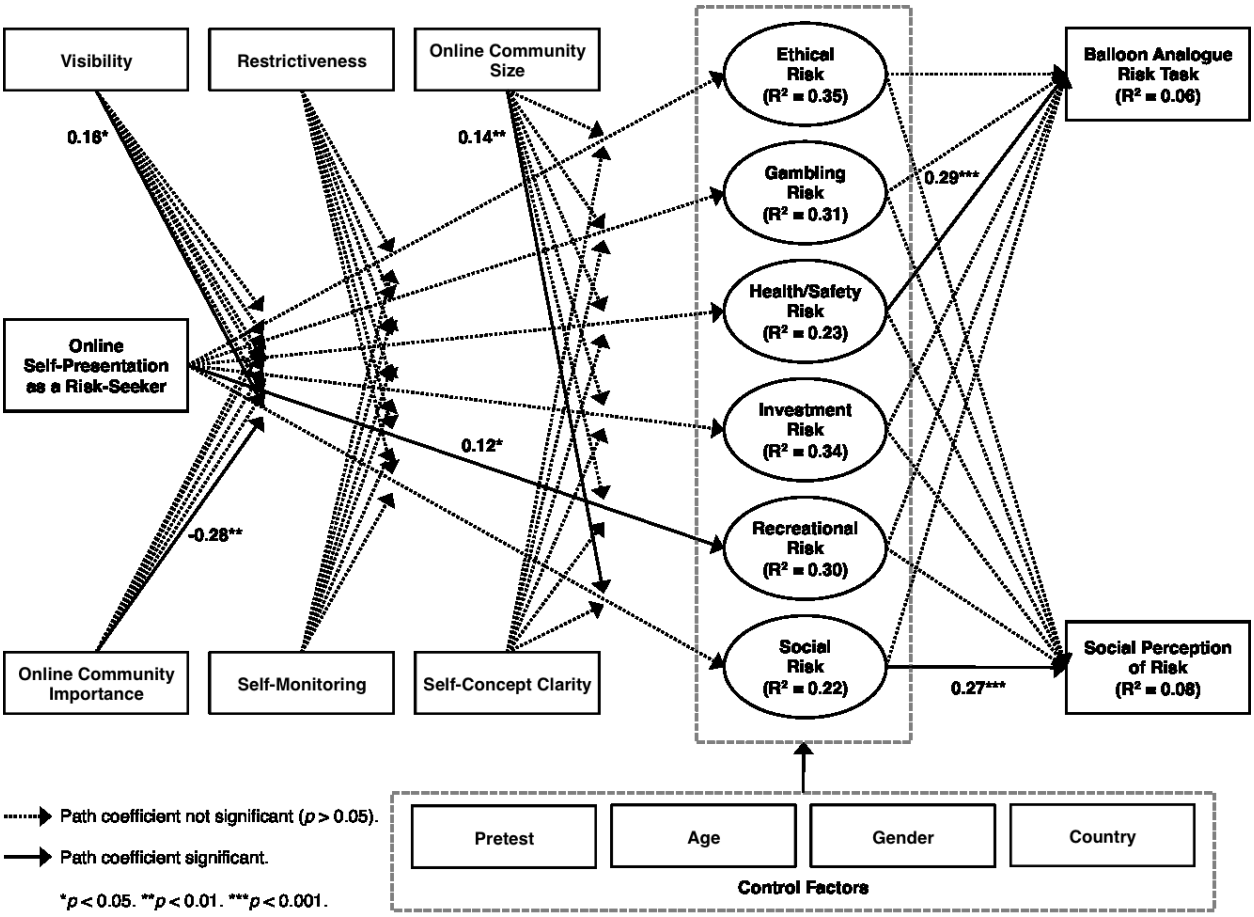

Figure 5: Results of PLS Regression Analysis for Experiment 3

Table 16 presents select results of all path coefficients from the independent variables to the domain-specific risk self-concept constructs. Age is positively related to gambling risk self-concept ($\beta = 0.18$, $t(499) = 3.72$, $p < 0.001$). Thus, participants that are older rated themselves as more risk seeking with regards to gambling risk than participants that are younger. As in Experiment 2, age is also positively related investment risk self-concept ($\beta = 0.13$, $t(499) = 2.10$,

$p < 0.05$). Participants that are older rated themselves as more investment risk-seeking than participants that are younger. Lastly, age is positively related to social risk self-concept (β = 0.23, $t(499) = 4.86$, $p < 0.001$). Thus, participants that are older rated themselves as more social risk-seeking than participants that are younger. None of the other relationships between age and domain-specific risk self-concepts are significant ($p > 0.10$). Gender (coded "0" for male and "1" for female) is negatively related to ethical risk self-concept (β = -0.11, $t(499) = 2.11$, $p < 0.05$) and health/safety risk self-concept (β = -0.23, $t(499) = 4.12$, $p < 0.001$). Thus, female participants rated themselves as less risk-seeking with regards to ethical and health/safety risk than male participants. In contrast, gender is not significantly related to gambling, investment, recreational, or social risk self-concepts ($p > 0.10$). Pretest general risk self-concept is positively related to all domain-specific risk self-concepts, including ethical risk self-concept ($\beta = 0.17$, $t(499) = 3.07$, $p < 0.01$), gambling risk self-concept ($\beta = 0.29$, $t(499) = 5.21$, $p < 0.001$), health/safety risk self-concept ($\beta = 0.26$, $t(499) = 4.55$, $p < 0.001$), investment risk self-concept ($\beta = 0.40$, $t(499) = 7.68$, $p < 0.001$), recreational risk self-concept ($\beta = 0.43$, $t(499) = 8.01$, $p < 0.001$), and social risk self-concept ($\beta = 0.21$, $t(499) = 3.65$, $p < 0.001$). Thus, participants who rated themselves as more risk-seeking in general at the beginning of the experiment also rated themselves as more risk-seeking in all specific domains of risk at the end of the experiment. In terms of location-based differences, I found that the domain-specific risk self-concepts of participants based in Europe do not differ significantly from those of participants based in North America ($p > 0.10$). However, participants based in India rated themselves as significantly more risk-seeking with regards to ethical ($\beta = 0.27$, $t(499) = 4.11$, $p < 0.001$), gambling ($\beta = 0.19$, $t(499) = 2.84$, $p < 0.01$), investment ($\beta = 0.25$, $t(499) = 3.95$, $p < 0.001$), and recreational risk self-concept (β = 0.18, $t(499) = 2.74$, $p < 0.01$). In contrast, participants in India rated themselves as less risk-

seeking with regards to social risk self-concept (β = -0.14, $t(499) = 2.10$, $p < 0.05$). Similarly, participants located in countries categorized as "other" also rated themselves as significantly less risk-seeking with regards to health/safety risk (β = -0.17, $t(499) = 3.05$, $p < 0.01$) and social risk (β = -0.13, $t(499) = 2.32$, $p < 0.05$) than participants located in North America. Thus, overall, the domain-specific risk self-concepts of participants based in North America are significantly different from those based in Europe, India, and the rest of the world.

Table 16. Select PLS Regression Path Coefficients for Experiment 3

	Dependent Variable					
Independent Variable	ETH	GAM	HS	INV	REC	SOC
Age	0.09	0.18***	0.03	0.13*	-0.04	0.23***
Pretest[a]	0.17**	0.29***	0.26***	0.40***	0.43***	0.21***
Gender	-0.11*	-0.08	-0.23***	-0.09	-0.05	0.09
EUROPE	0.05	0.11	0.04	0.06	0.09	-0.09
INDIA	0.27***	0.19**	-0.03	0.25***	0.18**	-0.14*
ROW	0.05	-0.07	-0.17**	0.00	-0.03	-0.13**
SM	0.17	0.21	0.31*	0.04	0.00	0.15
SCC	-0.54***	-0.17	-0.08	0.06	0.03	-0.03
OSP	-0.01	-0.02	0.04	-0.07	0.12*	0.04
OSP × SM	-0.17	0.03	0.06	-0.06	-0.08	-0.14
OSP × SCC	-0.05	0.00	-0.01	-0.08	0.14	0.18
OCI	-0.03	-0.04	-0.10	0.09	-0.02	-0.28**
VISI	-0.04	0.04	0.09	-0.15	0.01	0.16*

Table 16. (continued)

	Dependent Variable					
Independent Variable	ETH	GAM	HS	INV	REC	SOC
OCS	-0.01	0.03	-0.02	0.03	0.04	0.14**
REST	-0.01	-0.10	-0.09	-0.10	-0.05	-0.04
R^2	0.35	0.31	0.23	0.34	0.30	0.22

Note: $N = 284$. All path coefficients are standardized. Statistical significance is evaluated based on bootstrapping with 500 resamples. [a] Pretest general risk self-concept. ETH = Ethical Risk, GAM = Gambling Risk, HS = Health/Safety Risk, INV = Investment Risk, REC = Recreational Risk, SOC = Social Risk, EUROPE = Participants based in Europe, INDIA = Participants based in India, ROW = Participants based in other countries, OCI = Online Community Importance, SCC = Self-Concept Clarity, SM = Self-Monitoring, OSP = Online Self-Presentation, OCS = Online Community Size, IDEN = Identifiability, VISI = Visibility, REST = Restrictiveness.

*$p < .05$. **$p < .01$. ***$p < .001$.

To test H1, the impact of online self-presentation on the self-concept, I examined the significances of the six path coefficients from the treatment dummy variable (labeled "OSP") to the domain-specific risk self-concept constructs. The path to recreational risk self-concept is significantly different from zero ($\beta = 0.12$, $t(499) = 2.01$, $p < 0.05$). None of the other paths reached significance ($p > 0.10$). Given the particular emphasis of Experiment 3 on recreational risk, this finding is promising. It suggests that participants in the treatment groups rated themselves as significantly more risk-seeking with regards to recreational risk, after controlling for gender, age, location, and pretest general risk self-concept. Thus, H1 is supported specifically for recreational risk self-concept. To test H2, the positive relationship between self-concept and behavior, I examined the significances associated with the six path coefficients from domain-

specific risk self-concept to BART. Only the path from health/safety risk self-concept to BART is significant ($\beta = 0.29$, $t(499) = 3.95$, $p < 0.001$, all other $p > 0.10$). This suggests that participants who rated themselves higher on health/safety risk self-concept also clicked more, on average, on unexploded balloons in the BART. Thus, H2 is supported for health/safety risk self-concept. To test H3, the negative relationship between self-concept and associated social perception, I assessed the six paths between the domain-specific risk self-concept constructs and social perception of risk. Contrary to expectations, the path coefficient from social risk self-concept to social perception is positive and significant ($\beta = 0.27$, $t(499) = 4.13$, $p < 0.001$). Thus, participants who rated themselves as more risk-seeking perceived a fictitious person to be more risk-seeking than participants who rated themselves as less social risk-seeking. None of the other paths are significant ($p > 0.10$). Given that I hypothesized self-concept to be negatively related to social perception, H3 is not supported. To test H4, the moderating role of visibility, I evaluated the significance of the paths between the dummy variable (labeled "VISI") and the domain-specific risk self-concepts. Interestingly, only the path to social risk self-concept is significant ($\beta = 0.16$, $t(499) = 2.08$, $p < 0.05$, all other $p > 0.10$). Thus, participants in the public condition rated themselves as more risk-seeking with regards to social risk than participants in the private condition, after controlling for differences due to age, gender, location, and pretest general risk self-concept. Given that the content of the online self-presentation focused on recreational risk, I believe that a change in social risk self-concept as a result of changes in visibility does not lend direct support for H4. The path coefficients between the dummy variable labeled "REST" and the six domain-specific risk self-concepts represent tests of hypothesis H6 – i.e. the moderating role restrictiveness. None of the path coefficients are significant ($p > 0.10$), thus not supporting H6. Next, I evaluated the moderating role of online community size (H7). An assessment of the

path coefficients from the interaction term (dummy variable labeled "OCS") to the domain-specific risk self-concepts revealed only a significant positive interaction on social risk self-concept ($\beta = 0.14$, $t(499) = 2.62$, $p < 0.01$, all other $p > 0.10$). Thus, participants who presented themselves online as a recreational risk-seeker in front of a large online community subsequently rated themselves as more social risk-seeking than participants who presented themselves in front of a small online community. This finding, similar to the one for visibility, is interesting but does not lend support for H7. To evaluate the moderating role of online community importance, I evaluated the significance associated with the paths to the six domain-specific risk self-concepts. Only the path to social risk self-concept was significant ($\beta = -0.28$, $t(499) = 3.14$, $p < 0.01$, all other $p > 0.10$). However, contrary to expectations, online community importance negatively moderates the impact of online self-presentation on the self-concept. Specifically, the negative path coefficient suggests that the more a participant cares about who reads his response on the Daredevils website, the less social risk-seeking he rates himself. This finding clearly does not support the hypothesized positive moderation in H8. To test H9, the moderating role of self-monitoring, I analyzed the significance of the six paths from the interaction of self-monitoring and online self-presentation to the domain-specific risk self-concept constructs. Again, none of the hypothesized paths reached significance ($p > 0.10$). Thus H9 is not supported. Finally, I evaluated the path coefficients from the interaction term of online self-presentation and self-concept clarity (OSP × SCC) to the six domain-specific risk self-concept constructs in order to test H10 – the moderating role of self-concept clarity. None of the paths were significant ($p > 0.10$), thus not lending support for H10. A summary overview of all hypothesis tests for Experiment 3 is provided in Table 17.

Table 17. Results of Hypotheses Tests for Experiment 3

Hypothesis (Main Variable)	Result
H1 (Online Self-Presentation)	Supported
H2 (Behavior)	Supported
H3 (Social Perception)	Not supported
H4 (Visibility)	Not supported
H5 (Identifiability)	--[a]
H6 (Restrictiveness)	Not supported
H7 (Online Community Size)	Not supported
H8 (Online Community Importance)	Not supported
H9 (Self-Monitoring)	Not supported
H10 (Self-Concept Clarity)	Not supported

Note: [a] Hypothesis not tested in this Experiment.

Discussion

The findings of Experiment 3 – albeit being mixed – provide further support for the main hypothesis that online self-presentation changes the self-concept in the same direction (H1). Specifically, participants in Experiment 3 exhibited domain-specific changes in their recreational risk self-concept following an online self-presentation as a recreational risk-seeker. Similar to Experiment 1, and in contrast to Experiment 2, participants in Experiment 3 were free to create an impression of being a recreational risk-seeker by writing about the most dangerous and daring outdoor sport activity they had ever done. Thus, Experiment 3 – like Experiment 1 – led participants to activate specific memories related to activities in which they took a big risk. It is

likely that the hypothesized spreading memory activation led to the observed changes in participants' self-concepts.

In addition, Experiment 3 found support for the hypothesis that self-concept is positively related to behavior (H2). Specifically, health/safety risk self-concept was found to be related with performance on the BART. Although this particular domain-specific risk self-concept was not found to be significantly related to behavior in Experiments 1 and 2, it is likely that the broader sample of Experiment 3 led to this change in relative importance of health/safety risk. Given that the BART was originally designed to measure health/safety risk, Experiment 3 provides strong support for the hypothesis that both self-report and behavioral measures of risk tap into a shared risk self-concept.

The hypothesis that self-concept is negatively related to social perception (H3) was not supported by Experiment 3. In fact, the observed strong negative relationship between social risk self-concept and social perception is surprising. What could explain this counter-intuitive finding? Maybe people who are more social risk-seeking tend to perceive others as more like them than people who are less social risk-seeking. Obviously, it would be premature to draw that conclusion from the findings of a single experiment. However, this is an interesting research question, which should be explored further. At this point, it appears that social perception is highly domain-specific and that it is influenced by factors beyond the domain-specific risk self-concept.

Experiment 3 did not find support for the hypothesis that visibility positively moderates the impact of online self-presentation on the self-concept (H4). However, it was found that participants who presented themselves as recreational risk-seekers online in public subsequently rated themselves as more social risk-seeking than participants who presented themselves as

recreational risk-seekers online in private. Two explanations could account for this finding. The first, which is based on the notion of spreading memory activation, suggests that increased visibility led to a stronger spreading memory activation process, which subsequently affected a separate domain-specific risk self-concept. In other words, participants in the public condition thought more about the dangerous outdoor sport activity they wrote about and subsequently remembered additional situations in which they took risk than participants in the private condition. Among those might have been predominantly social risk-taking situations, which then led to the change in social risk self-concept. Due to the social nature of the public condition, it is possible that thoughts about social risk were more likely to be activated than thoughts about other domains of risk. An alternative explanation could be that participants felt that creating an online self-presentation in front of a large online community is in and of itself a social risk, which would explain why participants who engaged in that act subsequently rated themselves as more social risk-seeking. Thus, when assessing their social risk self-concept, participants consciously or subconsciously looked at their own most recent behavior – that is sharing the most daring and dangerous outdoor sport activity one has ever done with an audience of 10,000 other people – and concluded that they must be relatively high social risk-seekers. In contrast, participants in the private condition created an online self-presentation that was only visible to the researchers. Thus, participants in the private condition might have thought that creating an online self-presentation in front of anonymous researchers is not an expression of taking a social risk. These post-hoc explanations raise interesting questions for further research.

Restrictiveness was not found to negatively moderate the impact of online self-presentation on the self-concept (H6). Similar to Experiment 1 and 2, it is possible that the manipulation of limiting the text field to 160 characters (in the restricted condition) does not

reduce the psychological ownership over one's online self-presentation and thus does not create the anticipated interaction effect. Although contrary to what I was expecting, I believe the fact that text field length does not affect the impact of one's online self-presentation on the self-concept is an interesting null finding. The finding suggests that participants might have felt equally in control and used equal effort in the creation of their online self-presentation in both restrictiveness conditions, so that the impact on their self-concepts was not moderated.

Experiment 3 did not find that online community size positively moderates the impact of online self-presentation on the self-concept (H7). However, participants who created an online self-presentation as a recreational risk-seeker in front of an online community of 10,000 people later rated themselves as more social risk-seeking than participants who created an online self-presentation in front of an online community of 50 people. Possible explanations for this finding follow those of H4 (i.e. visibility). In essence, the social nature of the situation might have cued participants to activate memories predominantly related to social risk. Alternatively, participants might have felt that the act of presenting oneself in front of a large online community is a form of social risk-taking. Thus, when assessing their social risk self-concept, participants in the large online community condition might have had a concrete memory of social risk-taking more readily available than participants in the small online community condition. Clearly, further research is needed to understand if and to what extent the act of online self-presentation in front of a large online community can be considered a form of social risk.

The hypothesis that online community importance moderates the impact of online self-presentation on the self-concept (H8) was not supported by the data. Interestingly, it was found that online community importance negatively moderates the impact of online self-presentation on social risk self-concept. Participants who cared more (less) about who reads their response on

the website subsequently rated themselves as less (more) social risk-seeking. It is possible that people who are social risk-seekers tend to be careless about how they present themselves online. This explanation is in line with the idea that online self-presentation is in and of itself a form of social risk. In light of this finding, it is important to point out again that I measured online community importance with a single item (i.e. "I care about who reads my response on the Daredevils website" on a scale from 1 = "strongly disagree" to 7 = "strongly agree"). Unfortunately, this item has ambivalent meaning. On the one hand, the item can be understood as assessing how much someone cares that anyone reads their response on the Daredevils website, in general. On the other hand, it can be understood as assessing how much someone cares about the people who read their response on the Daredevils website, in specific. Naturally then, Experiment 3 does not provide conclusive evidence for the proposed explanation. Further research is needed to untangle the relationships between perceived online community importance, social risk self-concept, and online self-presentation.

Self-monitoring was not found to moderate the relationship between online self-presentation and self-concept (H9). Again, it is possible that the multidimensional nature of the self-monitoring construct, which is currently not reflected in the measurement instrument, contributed to the lack of findings. Once further research identifies and develops more fine-grained measures for the various aspects of self-monitoring, it would be interesting to replicate this experiment and probe for potential moderation by specific aspects of self-monitoring. However, at this point, H9 must be rejected.

Lastly, Experiment 3 tested the moderating role of self-concept clarity (H10). Although the data do not support the proposed relationship, it is interesting to note that self-concept clarity is negatively related to ethical risk self-concept. The more participants have a clear and well-

defined self-concept, the less they rate themselves as ethical risk-seekers. Given that ethical risk self-concept is measured by such items as “Passing off somebody else's work as your own” and “Revealing a friend's secret to someone else,” it is very likely that people with a more clearly defined self-concept are more convinced that they are not the kind of person who would engage in such activities. Obviously, the observed relationship in Experiment 3 is based on self-report measures of self-concept clarity and ethical risk self-concept. Thus, this finding might be due to participants who are high in self-concept clarity wanting to be seen as someone who does not engage in ethical risk-taking. It would be fascinating to explore if people who are high in self-concept clarity are actually more likely to refrain from ethically risky activities than people who are low in self-concept clarity, if they were to find themselves in such a situation.

General Discussion

Individually, the findings of Experiments 1, 2, and 3 provide mixed support for the hypothesized relationships. However, when comparing the results across all three experiments, several strong patterns of results emerge. First, online self-presentation changes the self-concept in the same direction, if – and only if – people are led to recall and share memories of past experiences in a particular domain. As Experiments 1 and 3 have shown, people shift their domain-specific risk self-concepts when asked to recall and share instances in which they took a big risk. In contrast, Experiment 2 showed that asking people to imagine themselves taking a risk and sharing that imaginary experience is not enough to affect a change in one's self-concept. Given that the reasoning underlying the hypothesis that online self-presentation changes the self-concept is based on spreading memory activation, the fact that people only changed their self-concept after recalling actual memories is perfectly in line with theory. Moreover, it is important to note that the impact of online self-presentation on the self-concept is domain-specific. That is, following an online self-presentation as, for example, a recreational risk-seeker, only people's recreational risk self-concept changes. Thus, the spreading memory activation induced by an online self-presentation does not lead to drastic changes in all domain-specific risk self-concepts. A change, if any, is limited to the particular domain upon which the online self-presentation was focused. Furthermore, it is important to point out that participants in the control groups across all three experiments underwent the same exact instructions and procedures – except for being able to engage in the act of online self-presentation – as participants in the treatment groups. Since participants in the control groups were also asked to prepare for the upcoming online self-presentation, it is entirely possible that participants in the control group also changed their self-

concept as a result of spreading memory activation. As this would account for some of the mixed findings across the three studies, further research should definitely investigate this possibility.

Second, the relationship between self-concept and behavior is highly domain-specific and moderated by the characteristics of a particular sample. Specifically, among samples of undergraduate students located in the United States, Experiment 1 found that ethical and recreational risk self-concepts are related to risk behavior as measured by performance on the BART. In contrast, for a sample of the same population, Experiment 2 found no relationships between self-concept and performance on the BART. Yet in a broader sample of adults located in over 30 countries, Experiment 3 found that health/safety risk self-concept is related to risk behavior as measured by performance on the BART. Thus, the relationship between self-concept and behavior is domain-specific – i.e. specific risk self-concepts are related to particular types of risk behavior. Moreover, unique sample characteristics (e.g. age and location) seem to moderate this relationship, as evidenced by the contradictory findings across Experiments 1, 2, and 3.

Third, the relationship between self-concept and social perception is domain-specific and dependent upon prior activation of related cognitions. In Experiments 1 and 3, the measure of social perception was not content-specific to participants' online self-presentations. Subsequently, I did not find a relationship between self-concept and social perception. In contrast, in Experiment 2 the measure of social perception was specifically tied to the content of participants' online self-presentations (i.e. skydiving). Thus, only after imagining themselves as skydiving, people were receptive to a measure of social perception that was based on skydiving. Specifically, people who were more recreationally risk-seeking perceived someone who regularly engages in skydiving as less risk-seeking than people who were less recreationally risk-seeking. Therefore, it is possible that the relationship between self-concept and social perception

depends upon the prior activation of domain-specific cognitions. Moreover, the finding of Experiment 2 suggests that any relationship between self-concept and social perception is highly domain-specific and a measure aiming to capture the relationship between self-concept and social perception should be clearly related to the same content domain.

Fourth, visibility does not moderate the impact of online self-presentation on the self-concept, because people generally feel that their behavior on the Internet is public. As Experiments 1, 2, and 3 have shown, people generally feel that their behavior on the Internet is relatively public, even if I specifically told them otherwise. This explains why the manipulation of visibility (public versus private) did not lead to the expected interaction. In essence, whenever people visit a website and post something on it, they assume that their response is or will become public. I believe that the web browser has become a metaphorical window to the public world of the Internet and people have become accustomed to the fact that their actions on the Internet are relatively public. Of course, it is possible that some online activities are less public than others, such as online banking or sending an email. However, given my findings, it seems that posting a comment on a website is universally considered to be a public act, irrespective of the website's promises to treat one's response as confidential.

Fifth, identifiability does not moderate the impact of online self-presentation on the self-concept because people generally feel that their behavior on the Internet is anonymous. As Experiments 1 and 2 have shown, people generally feel that their behavior on the Internet is relatively anonymous, even when they provide their real name and email address while posting a comment on a website. Apparently, the identifiers of first name and last name, coupled with one's email address, do not create a strong sense of being identified on the Internet. I believe that this is a direct consequence of the recent trends in online social networks and third-party

authentication. In essence, people no longer feel uniquely identified by their name or email address online. Instead, it is possible that true identifiability can now only achieved by requiring people to login with their personal online social network credentials (e.g. Facebook, Twitter, Google+). Subsequently, they are uniquely identified by their name, photo, and profile link. Thus, although someone might have a common name, say John Doe, he becomes uniquely identified through third-party online social network authentication, because it reveals John Doe's personal network of social relationships with friends and family. Thus, online social network authentication resolves the problem to find out if a particular John Doe is a stranger or a person I actually know. Given that I did not test if and how authentication with one's online social network credentials moderates the impact of online self-presentation on the self-concept, it would be premature to conclude that third-party authentication would have influenced my results.

Sixth, restrictiveness does not moderate the impact of online self-presentation on the self-concept because people put as much effort into creating a short-form online self-presentation as they put into creating a long-form online self-presentation. In my theoretical development, I reasoned that the amount of effort and control one has over one's online self-presentation influences one's psychological ownership of the online self-presentation, which in turn moderates the extent to which one internalizes the content of the online self-presentation. Subsequently, I aimed to manipulate effort and control by technically limiting the maximum length of the online self-presentation – i.e. system restrictiveness. However, judging by the non-significant difference in the time people spent creating their online self-presentation in the long-form versus short-form conditions, it is possible that people did not actually put in more effort to create their long-form online self-presentations vis-à-vis their short-form online self-

presentations. Thus, it is possible that the length of an online contribution does not directly influence the extent of psychological ownership one perceives to have over it. Hence, people exhibited equal amounts of psychological ownership across both restrictiveness conditions, which subsequently led to the observed null finding with regards to changes in the self-concept. I believe this finding is highly important, especially with regards to the recent trend of short-form online self-presentation on the Internet (e.g. Twitter, Facebook status updates). If it is indeed the case that psychological ownership does not depend on the amount of one's online contribution, then further research is certainly needed to develop a theory of psychological ownership that accounts for the specific characteristics of online contributions.

Seventh, online community size does not moderate the impact of online self-presentation on the self-concept because the social impact of a group of people online is not the same as the social impact of a group of people being physically present. I theorized that a larger online community size should create greater social impact, which in turn should increase the effect of online self-presentation on the self-concept. My theoretical development was based on prior research using groups of physically present people. However, given the non-significant findings, it is possible that perceptions of audience size are different online as compared to "offline." Online, people do not have a visual imagery of the actual online community size (e.g. 50 or 10,000 people as in Experiment 3) and thus might not be as affected by it. If, on the other hand, the same self-presentation took place "offline", for example in a football stadium filled with 50 or 10,000 people, I believe one would have been able to capture a difference – not just in perceived community size, but also in terms of the impact on the self-concept. Thus, the lack of visual imagery and resulting sense of online community size might have contributed to the non-significant finding regarding the moderating role of online community size.

Eighth, online community importance does not moderate the impact of online self-presentation on the self-concept, possibly because of a general lack of perceived online community importance among the study's participants. However, Experiment 3 suggests that perceived online community importance is negatively related to social risk self-concept. Specifically, Experiment 3 found that people who care less about the online community also tend to rate themselves more social risk-seeking than people who care more about the online community. Recall that online community importance was not manipulated in Experiment 3. As a result, one cannot draw conclusions regarding the causal impact of online community importance.

Ninth, across all three experiments I did not find support for the hypothesis that self-monitoring moderates the impact of online self-presentation on the self-concept. This finding is surprising given that self-monitoring has been found to moderate the impact of self-presentation on the self-concept in face-to-face settings. Maybe the construct of self-monitoring in face-to-face communication is not the same as self-monitoring in computer-mediated communication. Although it seems likely that people who are high in self-monitoring also tend to be high in self-monitoring during computer-mediated communication, it is possible that the two are not necessarily related. Given that I am not aware of a measure for "computer-mediated self-monitoring," such reasoning can only be seen as exploratory in nature. In addition, the measure of self-monitoring has been criticized for its multi-dimensional nature, which makes additional research on self-monitoring definitely a worthwhile undertaking.

Tenth, self-concept clarity does not moderate the impact of online self-presentation on the self-concept. However, given that the relationship between online self-presentation and self-concept is highly domain-specific, it is possible that the general nature of self-concept clarity

does not account for domain-specific self-concept clarity. Maybe participants who did not have a well-defined recreational risk self-concept were more likely to change their recreational self-concept following an online self-presentation as a recreational risk-seeker than participants with a clear and well-defined recreational risk self-concept. Unfortunately, given the lack of risk domain-specific self-concept clarity measures, I was not able to capture these details.

Lastly, across all three experiments I found age and gender to be significantly correlated with most domain-specific risk self-concepts. In the samples of undergraduate students (Experiments 1 and 2), I found ethical risk self-concept to be negatively related to age. Thus, participants that were older rated themselves as less ethical risk-seeking than participants that were younger. Given the relatively small variance in age among the undergraduate student samples, this is an interesting finding. In contrast, in a broader sample of adults (Experiment 3), I found that age was positively related to gambling, investment, and social risk self-concept. In essence, the older the participants, the more they rated themselves as risk-seeking with regards to gambling, investment, and social risk. In terms of gender differences, I found that men rated themselves as more ethical risk-seeking (Experiments 1, 2, and 3), more health/safety risk-seeking (Experiments 2 and 3), and more gambling risk-seeking (Experiments 1 and 2) than women. Thus, there were significant effects for gender across all three experiments. Lastly, based on the findings of Experiment 3, people in India rate themselves as more risk-seeking with regards to ethical, investment, gambling, health/safety, and recreational risk, but less risk-seeking with regards to social risk, than people based in the United States. These location-based differences are interesting as they point towards cultural differences in domain-specific risk self-concepts that are worthy of further exploration.

Looking back at my research questions and the results of the three experiments, I can now offer the following answers: (a) How does the way one presents oneself online affect one's self-concept? The content of one's online self-presentation changes one's domain-specific self-concept. A process of inference and spreading memory activation is likely responsible for this domain-specific self-concept change. (b) Under what circumstances is a person's online self-presentation likely to lead to a self-concept change? Although in theory factors related to the system (i.e. visibility, identifiability, and restrictiveness), online community (i.e. size and importance), and user (i.e. self-monitoring and self-concept clarity) should influence the self-concept change, this is not the case. The most important circumstance affecting a domain-specific self-concept change is the content of one's online self-presentation: if – and only if – people are led to recall and share specific memories relating to a particular content domain will they exhibit a corresponding self-concept change. (c) What are the potential consequences of an altered self-concept? The self-concept has domain-specific consequences for one's behavior as well as for one's social perception. However, these consequences are highly domain-specific and are subject to influences by the particular characteristics of given sample.

Theoretical and Practical Implications

This study makes four key theoretical contributions. First, it applies self-identification theory to the context of online self-presentation. Self-identification theory was developed to explain the influence of self-presentation on the self-concept in the context of face-to-face self-presentation. In this context, it successfully predicted the outcome of self-presentation experiments, particularly involving the personality trait of extraversion. Moreover, self-identification theory suggests that factors related to the situation, audience, and person moderate the impact of self-presentation on the self-concept. These factors were found to be of importance

in the face-to-face context. Given the widespread behavior of online self-presentation among the general Internet population, I believe it is very important to understand the implications of such behavior – not just for business purposes, but for society overall. Self-identification theory seems to be a natural fit for this undertaking. To the best of my knowledge, this is the first study to apply self-identification theory to the context of online self-presentation. Second, this study extends self-identification theory in the context of online self-presentation. Recall that self-identification theory suggests that factors related to the situation, audience, and person moderate the impact of self-presentation on the self-concept. Since self-identification does not make specific predictions regarding moderating factors in the context of online self-presentation, I integrated insights from public commitment theory, psychological ownership theory, and social impact theory in order to make predictions regarding factors related to the system (i.e. visibility, identifiability, restrictiveness), online community (i.e. size and importance), and user (i.e. self-monitoring and self-concept clarity). Third, in three consecutive experiments (total $N = 969$), I tested the hypothesized relationships not just in the novel context of online self-presentation, but also – for the first time – using risk self-concept as the main dependent variable. Moreover, the experiments collected self-report as well as behavioral data regarding risk self-concept. Lastly, while two of the three experiments used undergraduate student subjects in the United States, the last experiment was conducted using an online sample of adults from 31 different countries. Overall, findings suggest that self-identification theory can be used to explain domain-specific changes in the self-concept following an online self-presentation. Moreover, the experiments found that certain domain-specific self-concepts are positively related to behavior and negatively related to social perception. Lastly, the experiments suggest that factors related to the system, online community, and user do not significantly influence the impact of online self-presentation

on the self-concept. Fourth, the present study refines self-identification theory by proposing that the content of one's online self-presentation serves as a trigger for spreading memory activation. Given the theory's reliance on inference and spreading memory activation as the key process underlying self-concept change, I believe it is crucial to understand the particularities of how inference and spreading memory activation can be triggered. The findings of this study suggest that people must be led to recall and share memories related to a particular content domain in order to achieve spreading memory activation. In contrast, a simple imagination exercise coupled with subsequent self-presentation is not enough to trigger the hypothesized process of inference and spreading memory activation.

Furthermore, this study makes the following five important practical contributions. First, this study suggests that brand marketing should focus on connecting with consumers through shared memories. For example, a powerful way to alter consumers' self-concepts would be to ask them to share their first experience with a brand online. Assuming the consumer had a positive first experience, the act of recalling and sharing these memories should change the self-concept in the direction of the online self-presentation. This should subsequently alter behavior, i.e. increasing loyalty, as well as social perception, i.e. perceiving others to be less enthusiastic about the brand. Obviously, in the case of a negative first experience, the act of online self-presentation could likewise have negative consequences for the brand. Second, this study suggests that the Internet is largely perceived to be public and anonymous. Thus, companies aiming to create a sense of privacy, or confidentiality, have to engage in additional consumer education in order to earn that perception. Simple instructions and messages on a website are not enough to convince online consumers that their behavior is truly private. Moreover, it is important to note that online consumers largely feel anonymous – even when they provide their

real name and email address. Therefore, companies aiming to create an online environment for trusted interactions and a sense of being identified need to integrate additional measures, such as third-party authentication through online social networks (e.g. Facebook, Twitter, Google+). Third, contribution length does not affect its impact on the self-concept. Thus, services like Twitter, with its character restriction, are just as powerful when it comes to affecting consumers' self-concepts than more traditional long-form contributions, like blogs. Fourth, audience perception is severely limited online. The findings from this study suggest that people have difficulties differentiating between audiences of 50 and 10,000 online when they are just informed about the audience size in writing. Thus, it might be important to add visual cues to influence perceptions of audience size. For example, live counters or automatically updating live statuses might help alleviate this problem. However, if and how even larger audience sizes can be successfully indicated online remains an open question. This research suggests that there is a misperception of audience size taking place online. Lastly, this research suggests personalizing online experiences by gender and location. My study reveals significant and consistent differences among gender and location with regards to risk self-concepts. Given that risk and other traits differ systematically by gender and location, it is surprising that even large and progressive e-retailers, such as Amazon, do not actively and more openly offer gender-based and location-based personalization options for their websites. In essence, websites could benefit from asking a few questions about their visitors in order to personalize the experience – at least to basic demographic characteristics.

Study Limitations and Future Work

Although the present study makes several important theoretical and practical contributions, it is not without limitations. The manipulation of online self-presentation focused

exclusively on risk, which leaves open the question of how other domains of the self-concept would be affected by online self-presentation. Although the underlying process of the carryover effect that is proposed by self-identification theory is memory activation, the current study does not measure memory activation directly. Moreover, the time between the online self-presentation and the measurement of the dependent variables is relatively short (less than 30 minutes), which raises the question of whether the carryover effect has any lasting impact on the self-concept. In addition, the dependent variables are only measured once, which does not allow examining the development of the carryover effect over time. Similarly, the current work is limited in inducing the subjects to present themselves online as risk-seeking only once, which leaves open the question of how repeated or even contrary online self-presentations impact the carryover effect. Furthermore, subjects are instructed to use an experimentally created website that is not part of their routinely used outlets for online self-presentation (e.g. Facebook, Twitter). As such, it is not clear if and how the carryover effect interacts in online environments that are regularly used for online self-presentation. Also, the present work does not examine feedback or interaction between the user and his or her online community. Additionally, the online self-presentation is limited to a textual representation of the self, which leaves open questions regarding other forms of online self-presentation (e.g. in photos, audio, videos, etc.). In addition, although Experiment 3 made use of a broad sample of adults from over 30 countries, questions regarding the influence of cultural differences have not been directly addressed.

Future work should use recall or response latency measures in order to understand the exact process of memory activation that is responsible for the carryover effect. Moreover, future work should also examine the dependent variables at a later point in time (e.g. after one week or one month) in order to assess the duration of the carryover effect. In addition, several measures

of the dependent variables at different points in time would allow examining the development of the carryover effect. Repeated online self-presentations should also be studied in future work, which could give insights into the relationship between the number of online self-presentations and their impact on the self-concept. Similarly, it would be interesting to investigate the impact of multiple contrary online self-presentations on the self-concept. Furthermore, future work should aim to study the carryover effect in naturally and routinely used online environments, such as Facebook or Twitter. Besides, future work could examine the impact of audience feedback and interaction in the context of online self-presentation. Additionally, the impact of different forms of online self-presentation, such as through photos, audio, or video recordings, should be examined. Moreover, future work should integrate additional domains of the self-concept outside of risk in order to gain a broader understanding of the carryover effect. In addition, future work should measure cultural values, which would allow examining additional moderating factors that could influence the carryover effect. Finally, future work should manipulate online community importance in order to be able to make causal claims about its moderating influence on the carryover effect.

Conclusion

The present work investigates the impact of online self-presentation on the self-concept. Online self-presentation is the goal-directed activity of publishing information on the Internet in order to influence the impressions formed by an online community about oneself. Numerous web-based applications, such as personal homepages, blogs, social network sites, and other forms of social media facilitate online self-presentation. Prior work found that a plethora of internal motives and external demands shape peoples' online self-presentations. Moreover, research in social psychology has shown that self-presentation in non-mediated, face-to-face environments, can strategically alter one's self-concept. The self-concept is a multi-faceted construct that encompasses all beliefs about oneself. In this context, the present work addresses the following questions: How does the way one presents oneself online affect one's self-concept? Under what circumstances is a person's online self-presentation likely to lead to a self-concept change? What are the potential consequences of an altered self-concept? To answer these questions, I develop a theoretical model that integrates self-identification theory, which suggests that self-presentation impacts the self-concept through a process of inference and memory activation, with insights from public commitment theory, psychological ownership theory, and social impact theory. I hypothesize that the impact of online self-presentation on the self-concept is moderated by system factors (visibility; anonymity; restrictiveness), online community factors (size; importance), and user factors (self-monitoring; self-concept clarity). In three consecutive experiments (total $N = 969$), I test the hypothesized relationships by inducing participants to present themselves online as a risk-seeker while manipulating system and online community factors. Subsequently, I measure participants' domain-specific risk self-concepts using self-report, behavioral, and social perception measures. Results suggest that online self-presentation

can indeed change one's domain-specific self-concept if – and only if – people are led to recall and share specific memories relating to a particular content domain. Although I do not find support for the moderating influence of system, online community, and user factors, results suggest that the self-concept has domain-specific consequences for one's behavior as well as for one's social perception. However, these consequences are highly domain-specific and are subject to influences by the particular characteristics of given sample. Given the nascent stream of research on online self-presentation, the present work makes significant theoretical and practical contributions upon which future research can build.

Appendix A: Task Description for Experiment 1

Instructions: For this task, we are interested in understanding how well you can create an impression of being a risk-seeker when introducing yourself. Using the form at the bottom of this page, please introduce yourself as you would when meeting someone for the first time and try to be convincing that you are a risk-seeking person. For example, you can write about your hobbies, favorite pastimes, or recreational activities in a way that makes you look risk-seeking. Feel free to exaggerate how much of a risk-seeker you are, but don't be outrageous, silly, or clearly untruthful. Your goal is to create as strong of an impression of being a risk-seeker as possible, while still being relatively honest about yourself.

[**Public condition**: Note that your response will be visible to 1000 students from Baruch College who will participate in this study.] [**Private condition**: Note that your response will only be visible to the researchers.]

[**Identified condition**: For participation credit, please provide your name and Baruch student email address.] [**Anonymous condition**: Do not reveal your name or any personally identifying information.]

Confederate responses:

Jiawei Cho responded: *"Hi! I am Jiawei. One of my biggest hobbies is skydiving! Skydiving is very risky. You have to sign a bunch of papers which clearly state that there is a chance the parachute not to open and you are taking the whole responsibility of that. When the plane is in the air, the door is opened and the cold air rushes in. Your adrenaline starts flowing. Evertime I jump I am a bit scared. But while flying down towards earth I have a peace of mind. The best feeling ever. Nothing exists in my mind, only the beaty of Mother Nature and enjoying*

the moment. Its hard to explain. But ever since I am looking for adventures which will get my adrenaline going."

Micheal Irwing responded: *"My name is Michael and I'm an accounting major. I love going to the casino. I am Aquarius and it is well known that we love to gamble. I go at least once a month and spend most time at the blackjack table. Hand after hand I put money down, full well knowing in the back of my mind that I could loose. However, the rush you get from each hand and waiting for each card to be overturned is so strong that there is no way I will stop playing! Last time I went to Atlantic city was in January. I won almost 500 bucks in one weekend!!! I'll definitely go back soon again."*

Benjamin Hou responded: *"Hello. My name is Benjamin. My favorite sport is snowboarding. I've been snowboarding for more than 10 years and really enjoy the thrill of going down double diamond runs! When you stand on top of the mountain and you look down you get this intense feeling. There's nothing like it. I usually wear helmet and like to go very fast. Last winter I went into halfpipe. Of course I fell but I put myself back together and went on. I am addicted to the adrenaline rush of snowboarding. I can't wait for winter to come back!"*

Appendix B: Construct Loadings for Experiment 1

Construct	Loading	Item
Ethical Risk	n/a[a]	Taking some questionable deductions on your income tax return.
	0.85	Having an affair with a married man/woman.
	0.71	Passing off somebody else's work as your own.
	n/a[a]	Revealing a friend's secret to someone else.
	n/a[a]	Leaving your young children alone at home while running an errand.
	0.67	Not returning a wallet you found that contains $200.
Gambling Risk	0.84	Betting a day's income at the horse races.
	0.91	Betting a day's income at a high-stake poker game.
	0.85	Betting a day's income on the outcome of a sporting event
Health/Safety Risk	n/a[a]	Drinking heavily at a social function.
	0.70	Engaging in unprotected sex.
	0.77	Driving a car without wearing a seat belt.
	0.81	Riding a motorcycle without a helmet.
	n/a[a]	Sunbathing without sunscreen.
	n/a[a]	Walking home alone at night in an unsafe area of town.
Investment Risk	0.77	Investing 10% of your annual income in a moderate growth mutual fund.

Appendix B: (continued)

Construct	Loading	Item
	0.85	Investing 5% of your annual income in a very speculative stock.
	0.86	Investing 10% of your annual income in a new business venture.
Recreational Risk	0.64	Going camping in the wilderness.
	0.72	Going down a ski run that is beyond your ability.
	0.79	Going whitewater rafting at high water in the spring.
	0.85	Taking a skydiving class.
	0.82	Bungee jumping off a tall bridge.
	0.79	Piloting a small plane.
Social Risk	n/a[a]	Admitting that your tastes are different from those of a friend.
	0.77	Disagreeing with an authority figure on a major issue.
	n/a[a]	Choosing a career that you truly enjoy over a more secure one.
	0.75	Speaking your mind about an unpopular issue in a meeting at work.
	0.68	Moving to a city far away from your extended family.
	n/a[a]	Starting a new career in your mid-thirties.

Note: [a] Item removed due to low loading (< 0.50) and high cross-loading (> 0.30). All loadings significant at $p < 0.001$. Significance evaluated based on bootstrapping with 500 resamples.

Appendix C: Task Description for Experiment 2

Instructions: Every month, about 10,000 people visit the website Skydiving.com, making it one of the most popular skydiving sites on the web. Skydiving.com is currently developing a new marketing campaign to encourage more people to try skydiving. To help with the campaign, we would like you to write about your imagined skydiving jump using the form below. Pretend that you have actually done skydiving and describe your experience in as much detail as possible. Your goal is to convince others to also try skydiving.

[**Public condition**: Note that your response will be posted on Skydiving.com, where it will be read by about 10,000 people visiting the website every month!] [**Private condition**: Note that your response will be treated confidential and only be used for internal marketing research purposes.]

[**Identified condition**: For participation credit, please provide your name and email address.] [**Anonymous condition**: Do not reveal your name or any personally identifying information.]

Confederate responses:

Jiawei Cho responded: *"Hi! I am Jiawei Cho and I remember the first time I went skydiving. It is one of the most thrilling and risky things I have ever done. Before I got on the plane I had to sign a bunch of papers which clearly state that there is a chance the parachute won't open and I am taking the whole responsibility of that. Once the plane was in the air and the cold air rushed in, my adrenaline started flowing! Being so high up in the air gave me mixed feelings of anxiety and freedom. But then I just jumped and while flying down towards earth I had a peace of mind. It was the best feeling ever. Nothing existed in my mind, only the beauty of*

Mother Nature and enjoying the moment. Its hard to explain. But you definitely have to try skydiving and experience it for yourself."

Micheal Irwing responded: *"Hey guys! My name is Michael Irwing. Have you ever gone skydiving? You have got to try it! What a rush! I've only gone twice in my life but boy would I love to go again. You get on the plane and it takes you up to 12,000 feet. That takes only 30 minutes or so. As you get ready to jump your adrenaline starts pumping. Then the pilot tells you to jump and you just go for it. You can't think twice, you just have to push yourself out of the plane. Then you're just free falling! It is an amazing feeling that goes through your whole body!! I can't put it in words, you just have to do it! After falling for some time you open your parachute and glide down to earth. Skydiving is super easy and the kick you get from it is second to none. So what are you waiting for?"*

Appendix D: Construct Loadings for Experiment 2

Construct	Loading	Item
Ethical Risk	0.76	Taking some questionable deductions on your income tax return.
	n/a[b]	Having an affair with a married man/woman.
	0.65	Passing off somebody else's work as your own.
	n/a[a]	Revealing a friend's secret to someone else.
	0.80	Leaving your young children alone at home while running an errand.
	n/a[a]	Not returning a wallet you found that contains $200.
Gambling Risk	0.85	Betting a day's income at the horse races.
	0.89	Betting a day's income at a high-stake poker game.
	0.89	Betting a day's income on the outcome of a sporting event
Health/Safety Risk	n/a[a]	Drinking heavily at a social function.
	n/a[b]	Engaging in unprotected sex.
	n/a[a]	Driving a car without wearing a seat belt.
	n/a[a]	Riding a motorcycle without a helmet.
	0.60	Sunbathing without sunscreen.
	0.90	Walking home alone at night in an unsafe area of town.
Investment Risk	0.79	Investing 10% of your annual income in a moderate growth mutual fund.

Appendix D: (continued)

Construct	Loading	Item
	0.75	Investing 5% of your annual income in a very speculative stock.
	0.83	Investing 10% of your annual income in a new business venture.
Recreational Risk	0.63	Going camping in the wilderness.
	n/a[a]	Going down a ski run that is beyond your ability.
	0.74	Going whitewater rafting at high water in the spring.
	0.83	Taking a skydiving class.
	0.75	Bungee jumping off a tall bridge.
	0.69	Piloting a small plane.
Social Risk	0.77	Admitting that your tastes are different from those of a friend.
	0.79	Disagreeing with an authority figure on a major issue.
	n/a[a]	Choosing a career that you truly enjoy over a more secure one.
	0.80	Speaking your mind about an unpopular issue in a meeting at work.
	n/a[a]	Moving to a city far away from your extended family.
	n/a[a]	Starting a new career in your mid-thirties.

Note: [a] Item removed due to low loading (< 0.50) and high cross-loading (> 0.30). [b] Item was not measured in this Experiment. All loadings significant at $p < 0.001$. Significance evaluated based on bootstrapping with 500 resamples.

Appendix E: Task Description for Experiment 3

Instructions: For the following task, we are interested in understanding how well you can present yourself as a "daredevil." A daredevil is someone who enjoys doing dangerous things. Using the form below, please write about the most daring and dangerous outdoor sport activity you have ever done. Describe the circumstances of what you did, when, with whom, and where. Feel free to exaggerate, but don't be outrageous, silly, or clearly untruthful. Your goal is to convince others that you truly are a daredevil.

[**Public/Large online community size condition**: Note that your response is public. It will be posted on this website and can be read by anyone on the web, including the 10,000 other study participants.] [**Public/Small online community size condition**: Note that your response is public. It will be posted on this website and can be read by anyone on the web, including the 50 other study participants.] [**Private condition**: Note that your response is private. It will not be posted on this website and only be read by the researchers.]

Confederate response:

"I'm definitely a daredevil as I've done many crazy things in my life. The most dangerous outdoor activity I ever did was heli-snowboarding in the Rocky Mountains while an avalanche warning was in effect! I clearly remember the day: I was in Utah with a couple of friends and we had perfect conditions. The sun was shining and there was plenty of fresh powder snow. An avalanche warning had been issued for the region, but we decided to risk it and take off anyway! Once the heli dropped us near the mountain top, I was both excited and scared: what if an avalanche goes off? It would take forever for rescue to come, so my chance of survival would be close to zero. What can I say? I snowboarded all the way down and luckily nothing happened. I totally risked my life that day. That makes me a true daredevil."

Appendix F: Construct Loadings for Experiment 3

Construct	Loading	Item
Ethical Risk	n/a[a]	Taking some questionable deductions on your income tax return.
	n/a[b]	Having an affair with a married man/woman.
	0.83	Passing off somebody else's work as your own.
	0.69	Revealing a friend's secret to someone else.
	0.75	Leaving your young children alone at home while running an errand.
	0.59	Not returning a wallet you found that contains $200.
Gambling Risk	0.89	Betting a day's income at the horse races.
	0.91	Betting a day's income at a high-stake poker game.
	0.91	Betting a day's income on the outcome of a sporting event
Health/Safety Risk	0.67	Drinking heavily at a social function.
	n/a[b]	Engaging in unprotected sex.
	n/a[a]	Driving a car without wearing a seat belt.
	n/a[a]	Riding a motorcycle without a helmet.
	0.70	Sunbathing without sunscreen.
	0.84	Walking home alone at night in an unsafe area of town.
Investment Risk	0.78	Investing 10% of your annual income in a moderate growth mutual fund.

Appendix F: (continued)

Construct	Loading	Item
	0.86	Investing 5% of your annual income in a very speculative stock.
	0.88	Investing 10% of your annual income in a new business venture.
Recreational Risk	0.54	Going camping in the wilderness.
	n/a[a]	Going down a ski run that is beyond your ability.
	0.70	Going whitewater rafting at high water in the spring.
	0.84	Taking a skydiving class.
	0.84	Bungee jumping off a tall bridge.
	0.80	Piloting a small plane.
Social Risk	0.71	Admitting that your tastes are different from those of a friend.
	n/a[a]	Disagreeing with an authority figure on a major issue.
	n/a[a]	Choosing a career that you truly enjoy over a more secure one.
	n/a[a]	Speaking your mind about an unpopular issue in a meeting at work.
	0.75	Moving to a city far away from your extended family.
	0.69	Starting a new career in your mid-thirties.
Self-Concept Clarity	0.78	My beliefs about myself often conflict with one another. (Reverse coded)

Appendix F: (continued)

Construct	Loading	Item
Self-Concept Clarity	0.70	On one day I might have one opinion of myself and on another day I might have a different opinion. (Reverse coded)
	0.68	I spend a lot of time wondering about what kind of person I really am. (Reverse coded)
	0.71	Sometimes I feel that I am not really the person that I appear to be. (Reverse coded)
	0.66	When I think about the kind of person I have been in the past, I'm not sure what I was really like. (Reverse coded)
	n/a[a]	I seldom experience conflict between the different aspects of my personality.
	0.66	Sometimes I think I know other people better than I know myself. (Reverse coded)
	0.80	My beliefs about myself seem to change very frequently. (Reverse coded)
	0.76	If I were asked to describe my personality, my description might end up being different from one day to another day. (Reverse coded)
	0.75	Even if I wanted to, I don't think I could tell seomeone what I'm really like. (Reverse coded)
	n/a[a]	In general, I have a clear sense of who I am and what I am.

Appendix F: (continued)

Construct	Loading	Item
	0.75	It is often hard for me to make up my mind about things because I don't really know what I want. (Reverse coded)

Note: [a] Item removed due to low loading (< 0.50) and high cross-loading (> 0.30). [b] Item was not measured in this Experiment. All loadings significant at $p < 0.001$. Significance evaluated based on bootstrapping with 500 resamples.

References

Ajzen, I. (1985). From Intentions to Actions: A Theory of Planned Behavior. In J. Kuhl & J. Beckmann (Eds.), *Action Control: From Cognition to Behavior*. New York: Springer.

Ajzen, I. (1991). The Theory of Planned Behavior. *Organizational Behavior and Human Decision Processes*, *50*(2), 179-211.

Alnuaimi, O. A., Robert Jr., L. P., & Markuping, L. M. (2010). Team Size, Dispersion, and Social Loafing in Technology-Supported Teams: A Perspective on the Theory of Moral Disengagement. *Journal of Management Information Systems*, *27*(1), 203-230.

Anderson, L. R., & Tolson, J. (1989). Group Members' Self-Monitoring as a Possible Neutralizer of Leadership. *Small Group Behavior*, *20*, 24-36.

Anonymous. (1998). To Reveal Or Not to Reveal: A Theoretical Model of Anonymous Communication. *Communication Theory*, *8*(4), 381-407.

Aron, R., Clemons, E. K., & Reddi, S. (2005). Just Right Outsourcing: Understanding and Managing Risk. *Journal of Management Information Systems*, (2), 37-55.

Asch, S. E. (1956). Studies of Independence and Conformity: I. A Minority of One Against a Unanimous Majority. *Psychological Monographs*, *70*(416).

Baldwin, L. P., Irani, Z., & Love, P. E. D. (2001). Outsourcing Information Systems: Drawing Lessons From a Banking Case Study. *European Journal of Information Systems*, (1), 15.

Bargh, J. A. (1989). Conditional Automaticity: Varieties of Automatic Influence in Social Perception and Cognition. In J. S. Uleman & J. A. Bargh (Eds.), *Unintended Thought* (3-51). New York: Guilford.

Bargh, J. A. (1996). Automaticity in Social Psychology. In E. T. Higgins & A. W. Kruglanski (Eds.), *Social Psychology: Handbook of Basic Principles* (169-183). New York: Guilford.

Baron, R. M., & Kenny, D. A. (1986). The Moderator-Mediator Variable Distinction in Social Psychological Research: Conceptual, Strategic, and Statistical Considerations. *Journal of Personality and Social Psychology*, *51*(6), 1173-1182.

Bateman, P. J., Pike, J. C., & Butler, B. S. (2011). To Disclose Or Not: Publicness in Social Networking Sites. *Information Technology & People*, *24*(1), 78-100.

Baumgardner, A. H. (1990). To Know Oneself is to Like Oneself: Self- Certainty and Self-Affect. *Journal of Personality and Social Psychology*, *58*, 1062-1072.

Bélanger, F., & Crossler, R. E. (2011). Privacy in the Digital Age: A Review of Information Privacy Research in Information Systems. *MIS Quarterly*, *35*(4), 1017-A36.

Bem, D. J. (1972). Self-Perception Theory. *Advances in Experimental Social Psychology*, *6*, 420-432.

Blais, A. R., & Weber, E. (2006). A Domain-Specific Risk-Taking (DOSPERT) Scale for Adult Populations. *Judgment and Decision Making, Vol. 1, No. 1, 2006*, *1*(1), 33-47.

Boyd, D. (2008). *Taken Out of Context: American Teen Sociality in Networked Publics*. Doctoral Dissertation at University of California-Berkeley, School of Information.

Boyd, D., & Ellison, N. (2007). Social Network Sites: Definition, History, and Scholarship. *Journal of Computer-Mediated Communication*, *13*(1), Article 11. Retrieved from http://jcmc.indiana.edu/Vol13/Issue1/Boyd.Ellison.html

Boyd, D., & Hargittai, E. (2010). Facebook Privacy Settings: Who Cares? *Firstmonday*, *15*(8).

Briggs, S. R., Cheek, J. M., & Buss, A. H. (1980). An Analysis of the Self-Monitoring Scale. *Journal of Personality and Social Psychology*, 38, 679-686.

Briggs, S., & Cheek, J. (1986). The Role of Factor Analysis in the Development and Evaluation of Personality Scales. *Journal of Personality*, 54, 106-148.

Burger, J. M. (1999). The Foot-in-the-Door Compliance Procedure: A Multiple-Process Analysis and Review. *Personality and Social Psychology Review*, *3*, 303-325.

Burger, J. M., & Guadagno, R. E. (2003). Self-Concept Clarity and the Foot-in-the-Door Procedure. *Basic and Applied Social Psychology*, *25*(1), 79–86. London: Taylor & Francis.

Burke, P. J. (1980). The Self: Measurement Requirements From an Interactionist Perspective. *Psychology Quarterly*, *43*, 18-29.

Buss, A. H., & Briggs, S. R. (1984). Drama and the Self in Social Interaction. *Journal of Personality and Social Psychology*, *36*, 608-618.

Butler, B. S. (2001). Membership Size, Communication Activity, and Sustainability: A Resource-Based Model of Online Social Structures. *Information Systems Research*, *12*(4), 346-362.

Campbell, J. D. (1990). Self-Esteem and Clarity of the Self-Concept. *Journal of Personality & Social Psychology*, (3), 90.

Campbell, J. D., & Lavallee, L. F. (1993). Who Am I? The Role of Self-Concept Confusion in Understanding the Behavior of People With Low Self-Esteem. *Self-Esteem: The Puzzle of Low Self-Regard* (3-36). New York: Plenum.

Campbell, J. D., Trapnell, P. D., Heine, S. J., Katz, I. M., Lavallee, L. F., & Lehman, D. R. (1996). Self-Concept Clarity: Measurement, Personality Correlates, and Cultural Boundaries. *Journal of Personality and Social Psychology*, *70*(1), 141-156.

Cheek, J. M. (1989). Identity Orientations and Self-Interpretation. In D. M. Buss & N. Cantor (Eds.), *Personality Psychology: Recent Trends and Emerging Directions* (275-285). New York: Springer.

Chen, S., Schechter, D., & Chaiken, S. (1996). Getting At the Truth Or Getting Along: Accuracy- Versus Impression-Motivated Heuristic and Systematic Processing. *Journal of Personality and Social Psychology*, *71*, 262-275.

Chidambaram, L., & Tung, L. L. (2005). Is Out of Sight, Out of Mind? An Empirical Study of Social Loafing in Technology-Supported Groups. *Information Systems Research*, *16*(2), 149-168.

Chin, W., Marcolin, B., Newsted, P. (2003). A Partial Least Squares Latent Variable Modeling Approach for Measuring Interaction Effects: Results From a Monte Carlo Simulation Study and an Electronic-Mail Emotion/Adoption Study. *Information Systems Research*, *14*(2), 189-217.

Choon-Ling, S., Tan, B. C., & Kwok-Kee, W. (2002). Group Polarization and Computer-Mediated Communication: Effects of Communication Cues, Social Presence, and Anonymity. *Information Systems Research*, *13*(1), 70-90.

Clarke, R. (1999). Internet Privacy Concerns Confirm the Case for Intervention. *Communications of the ACM*, *42*(2), 60-67.

Cohen, J. (1988). *Statistical Power Analysis for the Behavioral Sciences* (2nd Edition). Hillsdale, NJ: Lawrence Erlbaum.

Connolly, T., Jessup, L. M., & Valacich, J. S. (1990). Effects of Anonymity and Evaluative Tone on Idea Generation in Computer-Mediated Groups. *Management Science*, *5*(6), 689-703.

Cooley, C. H. (1902). *Human Nature and the Social Order*. New York: Charles Scribner's Sons.

Cortizo, J. C., Carrero, F. M., & Gómez, J. M. (2011). Introduction to the Special Issue: Mining Social Media. *International Journal of Electronic Commerce*, *15*(3), 5-8.

Costanzo, M., & Archer, D. (1989). Interpreting the Expressive Behavior of Others: The Interpersonal Perception Task. *Journal of Nonverbal Behavior*, *13*, 225-245.

Cronshaw, S. F., & Ellis, R. J. (1991). A Process Investigation of Self-Monitoring and Leader Emergence. *Small Group Research*, *22*, 403-420.

Cyr, D., Head, M., Larios, H., Pan, B. (2009). Exploring Human Images in Website Design: A Multi-Method Approach. *MIS Quarterly*, *33*(3), 539-566.

Daft, R. L., & Lengel, R. H. (1986). Organizational Information Requirements, Media Richness and Structural Design. *Management Science*, *32*(5), 554-571.

DeAndrea, D. C., & Walther, J. B. (2011). Attributions for Inconsistencies Between Online and Offline Self-Presentations. *Communication Research*, (6), 805-825.

DeAndrea, D. C., Shaw, A. S., & Levine, T. R. (2010). Online Language: The Role of Culture in Self-Expression and Self-Construal on Facebook. *Journal of Language and Social Psychology*, *29*(4), 425-442.

Debatin, B., Lovejoy, J. P., Horn, A., & Hughes, B. N. (2009). Facebook and Online Privacy: Attitudes, Behaviors, and Unintended Consequences. *Journal of Computer-Mediated Communication*, *15*, 83-108.

Debono, K. G., & Packer, M. (1991). The Effects of Advertising Appeal on Perceptions of Product Quality. *Personality and Social Psychology Bulletin*, *17*, 194-200.

Debono, K. G., & Snyder, M. (1995). Acting on One's Attitudes: The Role of a History of Choosing Situations. *Personality and Social Psychology Bulletin*, *21*, 629-636.

Dennis, A. R., & Kinney, S. T. (1998). Testing Media Richness Theory in the New Media: Cues, Feedback, and Task Equivocality. *Information Systems Research*, *9*(3), 256-274.

Dennis, A. R., & Valacich, J. S. (1999). Rethinking Media Richness: Towards a Theory of Media Synchronicity. *Proceedings of the 32nd Hawaii International Conference on System Sciences*. Los Alamitos, CA: IEEE Computer Society Press.

Dimitrov, D. M., & Rumrill, P. D. (2003). Pretest-Posttest Designs and Measurement of Change. *Work*, *20*(2), 159–165.

Dinev, T. (2006). An Extended Privacy Calculus Model for E-Commerce Transactions. *Information Systems Research*, (1), 61-80.

Dinev, T., Bellotto, M., Hart, P., Russo, V., Serra, I., & Colautti, C. (2006). Privacy Calculus Model in E-Commerce – A Study of Italy and the United States. *European Journal of Information Systems*, *15*(4), 389-402.

Dittmar, H. (1992). The *Social Psychology of Material Possessions: To Have is to Be*. New York: St. Martin's Press.

Dunning, D. (2003). The Relation of Self to Social Perception. In M. R. Leary & J. P. Tangney (Eds.), *The Handbook of Self and Identity* (421-441). New York: Guilford.

Dunning, D., & Cohen, G. L. (1992). Egocentric Definitions of Traits and Abilities in Social Judgment. *Journal of Personality and Social Psychology*, *63*, 341-355.

Dunning, D., & Hayes, A. F. (1996). Evidence for Egocentric Comparison in Social Judgment. *Journal of Personality and Social Psychology*, *71*, 218-229.

Edelman, D. C. (2010). Branding in the Digital Age: You're Spending Your Money in All the Wrong Places. *Harvard Business Review*, (December), 62-69.

Ellison, N., Heino, R., & Gibbs, J. L. (2006). Managing Impressions Online: Self-Presentation Processes in the Online Dating Environment. *Journal of Computer-Mediated Communication*, *11*(2), Article 2.

Etzioni, A. (1991). The Socio-Economics of Property. *Journal of Social Behavior and Personality*, *6*, 465-468.

Featherman, M. S., Valacich, J. S., & Wells, J. D. (2006). Is That Authentic Or Artificial? Understanding Consumer Perceptions of Risk in E-Service Encounters. *Information Systems Journal*, *16*(2), 107-134.

Fekadu, Z., & Kraft, P. (2001). Self-Identity in Planned Behavior Perspective: Past Behavior and Its Moderating Effects on Self-Identity-Intention Relations. *Social Behavior and Personality: An International Journal*, *29*(7), 671-685.

Festinger, L. (1957). *A Theory of Cognitive Dissonance*. Evanston, IL: Row & Peterson.

Festinger, L., & Carlsmith, J. M. (1959). Cognitive Consequences of Forced Compliance. *Journal of Abnormal and Social Psychology*, *58*, 203-210.

Freedman, J. L., & Fraser, S. C. (1966). Compliance Without Pressure: The Foot-in-the-Door Technique. *Journal of Personality and Social Psychology*, *4*, 195-202.

Funder, D. C., & Harris, M. J. (1986). On the Several Facets of Personality Assessment: The Case of Social Acuity. *Journal of Personality*, *54*, 528-550.

Furby, L. (1978). Possession in Humans: An Exploratory Study of Its Meaning and Motivation. *Social Behavior and Personality: An International Journal*, *6*, 49-65.

Furby, L. (1991). Understanding the Psychology of Possession and Ownership: A Personal Memoir and an Appraisal of Our Progress. *Journal of Social Behavior and Personality*, *6*, 457-463.

Gabrenya, W. K., Jr., & Arkin, R. M. (1980). Factor Structure and Factor Correlates of the Self-Monitoring Scale. *Personality and Social Psychology Bulletin*, 6, 13-22.

Gangestad, S. W., & Snyder, M. (2000). Self-Monitoring: Appraisal and Reappraisal. *Psychological Bulletin*, *126*(4), 530-555.

Gangestad, S., & Snyder, M. (1985). "To Carve Nature At Its Joints": On the Existence of Discrete Classes in Personality. *Psychological Review*, 92, 317-349.

Garland, H., & Brown, B. R. (1972). Face-Saving as Affected By Subject's Sex, Audiences' Sex and Audience Expertise. *Sociometry*, *35*, 280-289.

Gefen, D., Rigdon, E., Straub, D. (2011). An Update and Extension to SEM Guidelines for Administrative and Social Science Research. *MIS Quarterly*, *35*(2), III-XIV.

Gefen, D., Straub, D., Boudreau, M.-C. (2000). Structural Equation Modeling and Regression: Guidelines for Research Practice. *Communications of the Association for Information Systems*, *4*(7), 2-79.

Gefen, D., Wyss, S., & Lichtenstein, Y. (2008). Business Familiarity as Risk Mitigation in Software Development Outsourcing Contracts. *MIS Quarterly*, (3), 2008.

George, J. F., Easton, G. K., Nunamaker Jr, J. F., & Northcraft, G. B. (1990). A Study of Collaborative Group Work With and Without Computer-Based Support. *Information Systems Research*, *1*(4), 394-415.

Gerard, H. B., Wilhelmy, R. A., & Conolley, E. S. (1968). Conformity and Group Size. *Journal of Personality and Social Psychology*, *8*, 79-82.

Gibbs, J. L., Ellison, N., & Heino, R. D. (2006). Self-Presentation in Online Personals: The Role of Anticipated Future Interaction, Self-Disclosure, and Perceived Success in Internet Dating. *Communication Research*, *33*(2), 152-177.

Gibson, B., & Poposki, E. M. (2010). How the Adoption of Impression Management Goals Alters Impression Formation. *Personality & Social Psychology Bulletin*, *36*(11), 1543-54.

Goffman, E. (1959). *The Presentation of Self in Everyday Life*. Garden City, NY: Doubleday.

Gonzales, A., & Hancock, J. (2008). Identity Shift in Computer-Mediated Environments. *Media Psychology*, *11*(2), 167-185.

Guo, K. H., Yuan, Y., Archer, N. P., & Connelly, C. E. (2011). Understanding Nonmalicious Security Violations in the Workplace: A Composite Behavior Model. *Journal of Management Information Systems*, (2), 203-236.

Hagger, M. S., & Chatzisarantis, N. L. D. (2006). Self-Identity and the Theory of Planned Behaviour: Between- and Within-Participants Analyses. *British Journal of Social Psychology*, *45*(4), 731-757.

Hair, J., Black. W., Babin, B., & Anderson, R. (2009). *Multivariate Data Analysis* (7th Edition). Upper Saddle River, NJ: Prentice Hall.

Heider, F. (1958). *The Psychology of Interpersonal Relations*. New York: Wiley.

Hendrikson, E. (1948). A Study of Stage Fright and the Judgment of Speaking Time. *Journal of Applied Psychology*, *32*(5), 532-536.

Henseler, J., & Fassott, G. (2010). Testing Moderating Effects in PLS Path Models: An Illustration of Available Procedures. In: V. Esposito Vinzi et al. (Eds). *Handbook of Partial Least Squares*. Springer Handbooks of Computational Statistics. Berlin: Springer-Verlag.

Higgins, E. T., Klein, R., & Strauman, T. (1985). Self-Concept Discrepancy Theory: A Psychological Model for Distinguishing Among Different Aspects of Depression and Anxiety. *Social Cognition*, *3*, 51-76.

Hiltz, S. R., Turoff, M., & Johnson, K. (1989). Disinhibition, Deindividuation, and Group Processing in Pen Name and Real Name Computer Conferences. *Decision Support Systems*, *5*(2), 217-232.

Hoelter, J. W. (1985). The Structure of Self-Conception: Conceptualization and Measurement. *Journal of Personality and Social Psychology*, *49*, 1392-1407.

Hosch, H. M., & Marchioni, P. M. (1986). The Self-Monitoring Scale: A Factorial Comparison Among Mexicans, Mexican Americans and Anglo Americans. *Hispanic Journal of Behavioral Sciences*, 8, 225-242.

Ito, M., Baumer, S., Bittanti, M., Boyd, D., Cody, R., Herr, B., Horst, H. A., et al. (2009). *Hanging Out, Messing Around, Geeking Out: Living and Learning With New Media*. Cambridge: MIT Press.

Jackson, J. M., & Latané, B. (1981). All Alone in Front of All Those People: Stage Fright as a Function of Number and Type of Co-Performers and Audience. *Journal of Personality and Social Psychology*, *40*(1), 73-85.

James, W. (1890). *Principles of Psychology*. New York: Holt.

Jessup, L. M., & Tansik, D. A. (1991). Decision Making in an Automated Environment: The Effects of Anonymity and Proximity With a Group Decision Support System. *Decision Science*, *22*(2), 266-279.

Jessup, L. M., Connolly, T., & Galegher, J. (1990). The Effects of Anonymity on GDSS Group Process With and Idea-Generating Task. *MIS Quarterly*, *14*(3), 313-321.

Jones, E. E., Brenner, K. J., & Knight, J. G. (1990). When Failure Elevates Self-Esteem. *Personality and Social Psychology Bulletin*, *16*, 200-219.

Jones, E. E., Rhodewalt, F., Berglas, S., & Skelton, J. A. (1981). Effects of Strategic Self-Presentation on Subsequent Self-Esteem. *Journal of Personality and Social Psychology*, *41*(3), 407-421.

Jung, T., Youn, H., & Mcclung, S. (2007). Motivations and Self-Presentation Strategies on Korean-Based "Cyworld" Weblog Format Personal Homepages. *Cyberpsychology & Behavior*, *10*(1), 24-31.

Kardes, F. R., Sanbonmatsu, D. M., Voss, R. T., & Fazio, R. H. (1986). Self-Monitoring and Attitude Accessibility. *Personality and Social Psychology Bulletin*, *12*, 468-474.

Keil, M., Tan, B. C. Y., Wei, K.-K., Saarinen, T., Tuunainen, V., & Wassenaar, A. (2000). A Cross-Cultural Study on Escalation of Commitment Behavior in Software Projects. *MIS Quarterly*, (2), 299-325.

Kelley, H. H. (1967). Attribution Theory in Social Psychology. In D. Levine (Ed.), *Nebraska Symposium on Motivation*. Lincoln: University of Nebraska Press.

Kelly, A., & Rodriguez, R. (2006). Publicly Committing Oneself to an Identity. *Basic and Applied Social Psychology*, *28*(2), 185-191.

Kiesler, C. A. (1971). The *Psychology of Commitment: Experiments Linking Behavior to Belief*. New York: Academic Press.

Kim, H., & Papacharissi, Z. (2003). Cross-Cultural Differences in Online Self-Presentation: A Content Analysis of Personal Korean and US Homepages. *Asian Journal of Communication*, *13*(1).

Kim, J., & Lee, J. R. (2011). The Facebook Paths to Happiness: Effects of the Number of Facebook Friends and Self-Presentation on Subjective Well-Being. *Cyberpsychology, Behavior and Social Networking*, *14*(6), 359-64.

Kline, R. B. (2004). *Principles and Practice of Structural Equation Modeling* (2nd Edition). New York: Guilford.

Latané, B. (1981). The Psychology of Social Impact. *American Psychologist*, *36*(4), 343.

Latané, B., & Harkins, S. (1976). Cross-Modality Matches Suggest Anticipated State Fright a Multiplicative Power Function of Audience Size and Status. *Perception and Psychophysics*, *20*, 482-488.

Lazar, J., & Preece, J. (1998). Classification Schema for Online Communities. *Proceedings of the Association for Information Systems, Americas Conference* (84-86). Baltimore, MD.

Leimeister, J. M., Ebner, W., & Krcmar, H. (2005). Design, Implementation, and Evaluation of Trust-Supporting Components in Virtual Communities for Patients. *Journal of Management Information Systems*, *21*(4), 101-135.

Lejuez, C. W., Aklin, W. M., Zvolensky, M. J., & Pedulla, C. M. (2003). Evaluation of the Balloon Analogue Risk Task (BART) as a Predictor of Adolescent Real-World Risk-Taking Behaviours. *Journal of Adolescence*, *26*(4), 475-479.

Lejuez, C. W., Read, J. P., Kahler, C. W., Richards, J. B., Ramsey, S. E., Stuart, G. L., Strong, D. R., et al. (2002). Evaluation of a Behavioral Measure of Risk Taking: The Balloon Analogue Risk Task (BART). *Journal of Experimental Psychology: Applied*, *8*(2), 75-84.

Lennox, R., & Wolfe, R. (1984). Revision of the Self-Monitoring Scale. *Journal of Personality and Social Psychology*, 46, 1349-1364.

Li, D., Chua, P. Y. K., & Lu, H. (2005). Understanding Individual Adoption of Instant Messaging: An Empirical Investigation. *Journal of the Association for Information Systems*, *6*(4), 102-129.

Lim, W., Sia, S. K., & Yeow, A. (2011). Managing Risks in a Failing IT Project: A Social Constructionist View. *Journal of the Association for Information Systems*, *12*(6), 414-440.

Litwinski, L. (1942). Is There an Instinct of Possession? *British Journal of Psychology*, *33*, 28-39.

Liu, S., Zhang, J., Keil, M., & Chen, T. (2009). Comparing Senior Executive and Project Manager Perceptions of IT Project Risk: A Chinese Delphi Study. *Information Systems Journal*, *20*(4), 319-355.

Locke, J. (1690). *Two Treatises of Government*. London: Anwsham Churchill.

Ma, M., & Agarwal, R. (2007). Through a Glass Darkly: Information Technology Design, Identity Verification, and Knowledge Contribution in Online Communities. *Information Systems Research*, *18*(1), 42-67.

Markus, H., & Kunda, Z. (1986). Stability and Malleability of the Self-Concept. *Journal of Personality and Social Psychology*, *51*(4), 858-66.

Markus, H., & Wurf, E. (1987). The Dynamic Self-Concept: A Social Psychological Perspective. *Annual Review of Psychology*, *38*(1), 299–337.

Marwick, A. E., & Boyd, D. (2010). I Tweet Honestly, I Tweet Passionately: Twitter Users, Context Collapse, and the Imagined Audience. *New Media & Society*, *20*(10), 1-20.

McCafferty, D. (2011). Brave, New Social World. *Communications of the ACM*, *54*(7), 19-21.

McClelland, D. (1951). *Personality*. New York: Holt, Rinehart & Winston.

McKillop, K. J., Berzonsky, M. D., & Schlenker, B. R. (1992). The Impact of Self-Presentations on Self-Beliefs: Effects of Social Identity and Self-Presentational Context. *Journal of Personality*, *60*(4), 789-808.

McKnight, D. H. (2002). Developing and Validating Trust Measures for E-Commerce: *Information Systems Research*, (3), 2002.

Mead, G. H. (1934). *Mind, Self, and Society*. Chicago: University of Chicago.

Meertens, R. M., & Lion, R. (2008). Measuring an Individual's Tendency to Take Risks: The Risk Propensity Scale. *Journal of Applied Social Psychology*, *38*(6), 1506-1520.

Mehdizadeh, S. (2010). Self-Presentation 2.0: Narcissism and Self-Esteem on Facebook. *Cyberpsychology, Behavior and Social Networking*, *13*(4), 357-64.

Milgram, S., Bickman, L., & Berkowitz, L. (1969). Note on the Drawing Power of Crowds of Different Size. *Journal of Personality and Social Psychology*, *13*, 79-82.

Mischel, W., & Shoda, Y. (1995). A Cognitive-Affective System Theory of Personality: Reconceptualizing Situations, Dispositions, Dynamics, and Invariance in Personality Structure. *Psychological Review*, *102*, 246-268.

Nowack, W., & Kammer, D. (1987). Experimental Studies of Self-Monitoring: Validation of the Two-Factor Model. *European Journal of Personality*, 1, 61-77.

Nunamaker Jr., J., Applegate, L. M., & Konsynski, B. R. (1987). Facilitating Group Creativity: Experience With a Group Decision Support System. *Journal of Management Information Systems*, *3*(4), 5-19.

Orlikowski, W., & Iacono, C. (2001). Research Commentary: Desperately Seeking the "IT" in IT Research – a Call to Theorizing the IT Artifact. *Information Systems Research*, *12*(2), 121-134.

Papacharissi, Z. (2002). The Presentation of Self in Virtual Life: Characteristics of Personal Home Pages. *Journalism and Mass Communication Quarterly*, *79*(3), 643-660.

Papacharissi, Z., & Gibson, P. (2011). Fifteen Minutes of Privacy: Privacy, Sociality and Publicity on Social Network Sites. In L. Reinecke & S. Tepte (Eds.), *Privacy Online: Theoretical Approaches and Research Perspectives on the Role of Privacy in the Social Web* (75-89). New York: Springer.

Parameswaran, M., & Whinston, A. (2007). Research Issues in Social Computing. *Journal of the Association for Information Systems*, *8*(6), 336-350.

Pierce, J. L., Kostova, T., & Dirks, K. T. (2003). The State of Psychological Ownership: Integrating and Extending a Century of Research. *Review of General Psychology*, *7*(1), 84-107.

Pinsonneault, A., & Heppel, N. (1997). Anonymity in Group Support Systems Research: A New Conceptualization, Measure, and Contingency Framework. *Journal of Management Information Systems*, *14*(3), 89-108.

Pomerantz, E. M., Chaiken, S., & Tordesillas, R. S. (1995). Attitude Strength and Resistance Processes. *Journal of Personality and Social Psychology*, *69*(3), 408-419.

Porter, C. E. (2004). A Typology of Virtual Communities: A Multi-Disciplinary Foundation for Future Research. *Journal of Computer-Mediated Communication*, *10*(1), Article 3.

Porter, H. (1939). Studies in the Psychology of Stuttering: XIV. Stuttering Phenomena in Relation to Size and Personnel of Audience. *Journal of Speech Disorders*, *4*, 323-333.

Preece, J., & Maloney-Krichmar, D. (2005). Online Communities: Design, Theory, and Practice. *Journal of Computer-Mediated Communication*, *10*(4), Article 1. Retrieved from http://jcmc.indiana.edu/Vol10/Issue4/Preece.html

Qian, H., & Scott, C. R. (2007). Anonymity and Self-Disclosure on Weblogs. *Journal of Computer-Mediated Communication*, *12*(4), 1428-1451.

Qureshi, I. & Compeau, D. (2009). Assessing Between-Group Differences in Information Systems Research: A Comparison of Covariance- and Component-Based SEM. *MIS Quarterly*, *33*(1), 197-214.

Raban, D. R. (2009). Self-Presentation and the Value of Information in Q&A Websites. *Journal of the American Society for Information Science and Technology*, *60*(12), 2465-2473.

Ramachandran, V., & Gopal, A. (2010). Managers' Judgments of Performance in IT Services Outsourcing. *Journal of Management Information Systems*, (4), 181-218.

Rhodewalt, F., & Augustsdottir, S. (1986). Effects of Self-Presentation on the Phenomenal Self. *Journal of Personality and Social Psychology*, *50*(1), 47-55.

Ridings, C. M., & Gefen, D. (2004). Virtual Community Attraction: Why People Hang Out Online. *Journal of Computer-Mediated Communication*, *10*(1). Retrieved from http://jcmc.indiana.rdu/Vol10/Issue1/Ridings_Gefen.html

Ridings, C. M., Gefen, D., & Bay, A. (2002). Some Antecedents and Effects of Trust in Virtual Communities. The *Journal of Strategic Information Systems*, *11*(3-4), 271-295.

Riggio, R. E., & Friedman, H. S. (1982). The Interrelationships of Self-Monitoring Factors, Personality Traits, and Nonverbal Skills. *Journal of Nonverbal Behavior*, 7, 33-45.

Salancick, G. R. (1977). Commitment and the Control of Organizational Behavior and Belief. In B. M. Staw & G. R. Salancick (Eds.), *New Directions in Organizational Behavior* (1-54). Chicago: St. Claire Press.

Sartre, J. P. (1943). *Being and Nothingness: A Phenomenological Essay on Ontology*. New York: Philosophical Library.

Schau, H., & Jensen, G. (2003). We Are What We Post? *Journal of Consumer Research*, (3), 385-404.

Schlenker, B. R. (1980). *Impression Management: The Self-Concept, Social Identity, and Interpersonal Relations*. Monterey, CA: Brooks/Cole.

Schlenker, B. R. (1982). Translating Actions Into Attitudes: An Identity-Analytic Approach to the Explanation of Social Conduct. In L. Berkowitz (Ed.), *Advances in Experimental Social Psychology* (15th Edition). New York: Academic Press.

Schlenker, B. R. (1985). Identity and Self-Identification. In B. R. Schlenker (Ed.), The *Self and Social Life* (65-99). New York: Mcgraw-Hill.

Schlenker, B. R. (1986). Self-Identification: Toward an Integration of the Private and Public Self. In R. F. Baumeister (Ed.), *Public Self and Private Life* (21-62). New York: Springer.

Schlenker, B. R. (2003). Self-Presentation. In M. R. Leary & J. Price (Eds.), *Handbook of Self and Identity* (492-518). New York: Guilford.

Schlenker, B. R., & Trudeau, J. (1990). Impact of Self-Presentations on Private Self-Beliefs: Effects of Prior Self-Beliefs and Misattribution. *Journal of Personality and Social Psychology*, *58*(1), 22-32.

Schlenker, B. R., & Weigold, M. F. (1989). Goals and the Self-Identification Process: Constructing Desired Identities. In L. A. Pervin (Ed.), *Goal Concepts in Personality and Social Psychology* (243-290). Hillsdale, NJ: Erlbaum.

Schlenker, B. R., & Weigold, M. F. (1992). Interpersonal Processes Involving Impression Regulation and Management. *Annual Review of Sociology*, *43*, 133-168.

Schlenker, B. R., & Wowra, S. A. (2003). Carryover Effects of Feeling Socially Transparent Or Impenetrable on Strategic Self-Presentation. *Journal of Personality and Social Psychology*, *85*(5), 871- 880.

Schlenker, B. R., Dlugolecki, D. W., & Doherty, K. (1994). The Impact of Self-Presentations on Self-Appraisals and Behavior: The Power of Public Commitment. *Personality and Social Psychology Bulletin*, *20*(1), 20-33.

Schwarz, A., Jayatilaka, B., Hirschheim, R., & Goles, T. (2009). A Conjoint Approach to Understanding IT Application Services Outsourcing. *Journal of the Association for Information Systems*, (10), 748-781.

Seta, J., Crisson, J., Seta, C., & Wang, M. (1989). Task Performance and Perceptions of Anxiety: Averaging and Summation in an Evaluative Setting. *Journal of Personality and Social Psychology*, *56*(3), 387-396.

Setterlund, M. B., & Niedenthal, P. M. (1993). "Who Am I? Why Am I Here?": Self-Esteem, Self-Clarity, and Prototype Matching. *Journal of Personality and Social Psychology*, *65*, 769-780.

Shavitt, S., Lowrey, T. M., & Han, S.-P. (1992). Attitude Functions in Advertising: The Interactive Role of Products and Self-Monitoring. *Journal of Consumer Psychology*, *1*, 337-364.

Shen, Y.-C., Huang, C.-Y., Chu, C.-H., & Liao, H.-C. (2010). Virtual Community Loyalty: An Interpersonal-Interaction Perspective. *International Journal of Electronic Commerce*, *15*(1), 49-74.

Shepherd, M. M., Briggs, R. O., Reining, B. A., Yen, J., & Nunamaker, J. F. (1996). Invoking Social Comparison to Improve Electronic Brainstorming: Beyond Anonymity. *Journal of Management Information Systems*, *12*(3), 155-170.

Short, J., Williams, E., & Christie, B. (1976). The *Social Psychology of Telecommunications*. New York: Wiley.

Silver, M. S. (1988). User Prescriptions of Decision Support System Restrictiveness: An Experiment. *Journal of Management Information Systems*, *5*(1), 51-65.

Silver, M. S. (1990). Decision Support Systems: Directed and Nondirected Change. *Information Systems Research*, *1*(1), 47-70.

Slevin, J. (2000). *The Internet and Society*. Cambridge: Polity Press.

Smith, A. (2011). *Why Americans Use Social Media.* Report by The Pew Research Center's Internet & American Life Project. Retrieved from http://www.pewinternet.org/Reports/2011/Why-Americans-Use-Social-Media.aspx

Smith, J. R., Terry, D. J., Manstead, A. S. R., Louis, W. R., Kotterman, D., & Wolfs, J. (2007). Interaction Effects in the Theory of Planned Behavior: The Interplay of Self-Identity and Past Behavior. *Journal of Applied Social Psychology*, *37*(11), 2726-2750.

Smith, M., Wethington, E., & Zhan, G. (1996). Self-Concept Clarity and Preferred Coping Styles. *Journal of Personality*, *64*, 407-434.

Snyder, M., & Gangestad, S. (1986). On the Nature of Self-Monitoring: Matters of Assessment, Matters of Validity. *Journal of Personality and Social Psychology*, 51, 125-139.

Snyder, M. (1974). Self-Monitoring of Expressive Behavior. *Journal of Personality and Social Psychology*, *30*, 526–537.

Sparacino, J., Ronchi, D., Bigley, T. K., Flesch, A. L., & Kuhn, J. W. (1983). Self-Monitoring and Blood Pressure. *Journal of Personality and Social Psychology*, 44, 365-375.

Sparks, P., & Guthrie, C. A. (1998). Self-Identity and the Theory of Planned Behavior: A Useful Addition Or an Unhelpful Artifice? *Journal of Applied Social Psychology*, *28*(15), 1393-1410.

Sproull, L., & Faraj, S. (1997). Atheism, Sex and Databases: The Net as a Social Technology. In S. Kiesler (Ed.), *Culture of the Internet* (35-51). Mahwah, NJ: Lawrence Erlbaum Associates.

Sproull, L., & Kiesler, S. (1991). *Connections: New Ways of Working in the Networked Organization*. Cambridge, MA: MIT Press.

Steiner, P. (1993). On the Internet, Nobody Knows You're a Dog. *The New Yorker*, *69*(20), 61.

Stern, S. (2008). Producing Sites, Exploring Identities: Youth Online Authorship. In D. Buckingham (Ed.), *Youth, Identity, and Digital Media* (95-118). Cambridge, MA: MIT Press.

Straub, D., & Welke, R. J. (1998). Coping With Systems Risk: Security Planning Models for Management Decision Making. *MIS Quarterly*, (4), 441-469.

Straub, D., Boudreau, M., Gefen, D. (2004). Validation Guidelines for IS Positivist Research. *Communications of the Association for Information Systems*, 13, 380-427.

Stryker, S. (1980). *Symbolic Interactionism*. Menlo Park, CA: Benjamin/Cummings.

Suleiman, J., & Watson, R. (2008). Social Loafing in Technology-Supported Teams. *Computer Supported Cooperative Work*, *17*(4), 291-309.

Sullivan, H. S. (1953). *The Interpersonal Theory of Psychiatry*. New York: Norton.

Sun, L., Srivastava, R. P., & Mock, T. J. (2006). An Information Systems Security Risk Assessment Model Under the Dempster-Shafer Theory of Belief Functions. *Journal of Management Information Systems*, (4), 109-142.

Swann, W. B. (1983). Self-Verification: Bring Social Reality Into Harmony With the Self. In J. Suls & A. G. Greenwald (Eds.), *Social Psychological Perspectives on the Self* (33-66). Hillsdale, NJ: Erlbaum.

Thorbjørnsen, H., Pedersen, P. E., & Nysveen, H. (2007). "This is Who I Am": Identity Expressiveness and the Theory of Planned Behavior. *Psychology and Marketing*, *24*(9), 763-785.

Tice, D. M. (1992). Self-Concept Change and Self-Presentation: The Looking Glass Self is Also a Magnifying Glass. *Journal of Personality and Social Psychology*, *63*(3), 435-451.

Toma, C. L., & Hancock, J. T. (2010). Looks and Lies: The Role of Physical Attractiveness in Online Dating Self-Presentation and Deception. *Communication Research*, *37*(3), 335-351.

Trochim, W., & Donnelly, J. P. (2007). *The Research Methods Knowledge Base* (3rd Edition). Mason, OH: Cengage Learning-Atomic Dog.

Turkle, S. (1995). *Life on the Screen: Identity in the Age of the Internet*. New York: Simon & Schuster.

Valacich, J.S., Wheeler, B. C., Mennecke, B. E. ., & Wachter, R. (1995). The Effects of Numerical and Logical Group Size on Computer-Mediated Idea Generation. *Organizational Behavior and Human Decision Processes*, *62*(3), 318-329.

Van Slyke, C. (2006). Concern for Information Privacy and Online Consumer Purchasing. *Journal of the Association for Information Systems*, (6), 415-443.

Van Slyke, C., Ilie, V., Lou, H., & Stafford, T. (2007). Perceived Critical Mass and the Adoption of a Communication Technology. *European Journal of Information Systems*, *16*(3), 270-283.

Walther, J. B. (1996). Computer-Mediated Communication: Impersonal, Interpersonal, and Hyperpersonal Interaction. *Communication Research*, *23*(1), 3-43.

Walther, J. B. (2007). Selective Self-Presentation in Computer-Mediated Communication: Hyperpersonal Dimensions of Technology, Language, and Cognition. *Computers in Human Behavior*, *23*(5), 2538-2557.

Wang, W., & Benbasat, I. (2009). Interactive Decision Aids for Consumer Decision Making in E-Commerce: The Influence of Perceived Strategy Restrictiveness. *MIS Quarterly*, *33*(2), 293-320.

Wellman, B. (1979). The Community Question. *American Journal of Sociology*, *84*, 1201-1231.

Wellman, B., Quan-Haase, A., Boase, J., Chen, W., Hampton, K., Diaz, I., & Miyata, K. (2003). The Social Affordances of the Internet for Networked Individualism. *Journal of Computer-Mediated Communication*, *8*(3).

Willcocks, L. P., & Lacity, M. C. (1999). IT Outsourcing in Insurance Services: Risk, Creative Contracting and Business Advantage. *Information Systems Journal*, *9*(3), 163-180.

Williams, K., Harkins, S., & Latané, B. (1981). Identifiability as a Deterrent to Social Loafing: Two Cheering Experiments. *Journal of Personality and Social Psychology*, *40*, 303-311.

Wilson, J., & Jessup, L. M. (1995). A Field Experiment on GSS Anonymity and Group Member Status. *Proceedings of the 28th Annual Hawaii International Conference on System Sciences,* 212-221.

Wolf, S., & Latané, B. (1983). Majority and Minority Influences on Restaurant Preferences. *Journal of Personality and Social Psychology*, *45*(2), 282-292.

Zaleskiewicz, T. (2001). Beyond Risk Seeking and Risk Aversion: Personality and the Dual Nature of Economic Risk Taking. *European Journal of Personality*, *15*(S1), S105-S122.