TECHNOLOGIES OF PSYCHOLOGICAL EMPOWERMENT: 
THE ROLE OF AGENCY AND COMMUNITY IN BLOGGING

A Thesis in
Mass Communication
by
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ABSTRACT

Internet communication environments have been lauded equally for celebrating the individual, as well as for fostering communities. On the one hand, new media technologies empower individual users to control various aspects of the communication interaction, as manifest in portals. On the other hand, they empower users to connect with proximal or distal others, as most obvious in chatrooms. It was not until the recent introduction of blogs that these capabilities were featured simultaneously, under the full control of the blogger. This dissertation proposes that through both their voice-enhancing and community-oriented functions, blogs are all the more psychologically empowering by affording users the psychological benefits of both a sense of agency and a sense of community.

The present dissertation addressed the role of blogging in imbuing a sense of psychological empowerment in users belonging to traditionally underprivileged, marginalized groups in society (i.e., women), and tested the intervening role of sense of community and sense of agency in leading to psychological empowerment. A survey (N = 340) was first conducted to investigate women bloggers’ perceptions of their own empowerment, as a function of their type of blogging, motivations for blogging and blogging experience. Findings indicate that by affording users either a strong sense of community, or a deep sense of agency, or both, blogging is indeed psychologically empowering to those undertaking it. This was shown to be true for two different types of blogs, as well as for people with diverse motivations for use and various levels of experience with blogging. Due to the correlational
nature of the survey, a second experimental study was conducted next ($N = 233$), in order to tackle more directly the two theoretical routes leading to psychological empowerment. This was addressed via a moderated mediation model, i.e., manipulating sense of agency and sense of community. Results showed that while psychological empowerment did not differ across the two types of blogs this time, it was again elicited by sense of agency and sense of community. Theoretical and practical implications of these findings, study limitations and suggestions for future research are outlined in the end.
## TABLE OF CONTENTS

LIST OF FIGURES .................................................................................................................. vi  
LIST OF TABLES .................................................................................................................... vii  
Acknowledgments ................................................................................................................. ix  
Introduction .......................................................................................................................... 1  
Literature Review ................................................................................................................... 5  
Survey Study .......................................................................................................................... 31  
Experiment Study .................................................................................................................. 64  
General Discussion .............................................................................................................. 88  
References ............................................................................................................................. 104  
Appendix A: Tables .............................................................................................................. 118  
Appendix B: Survey Study Measures .................................................................................... 132  
Appendix C: Experiment Measures (Blogging Study) ......................................................... 145  
Appendix D: Experiment Measures (Journaling Study) ...................................................... 154  
Appendix E: Experiment Instructions (Blogging Study) ..................................................... 159
LIST OF FIGURES

Figure 1. Diagram presenting the summary of findings for the relationship between type of blogging and psychological empowerment.......................... 41

Figure 2. Motivations to connect X ethnicity interaction........ 43

Figure 3. Diagram presenting the summary of findings for the relationship between motivations for blogging and psychological empowerment.......................... 47

Figure 4. Diagram presenting the summary of findings for the relationship between blogging experience and psychological empowerment.......................... 52

Figure 5. Visits X Comments X Type of Blog Interaction...... 78

Figure 6. Diagram illustrating the summary of findings in the blogging experiment........................................ 79

Figure 7. Diagram illustrating the summary of findings in the journaling experiment........................................ 81
## LIST OF TABLES

<table>
<thead>
<tr>
<th>Table 1.</th>
<th>Factor Loadings Using Principal Components Analysis with Varimax Rotation for Empowerment Scale</th>
<th>118</th>
</tr>
</thead>
<tbody>
<tr>
<td>Table 2.</td>
<td>Factor Loadings Using Principal Components Analysis with Varimax Rotation for Motivations Scale</td>
<td>119</td>
</tr>
<tr>
<td>Table 3.</td>
<td>Summary Table of Regression Analyses for the Relationships between Type of Blogging and Psychological Empowerment</td>
<td>120</td>
</tr>
<tr>
<td>Table 4.</td>
<td>Summary Table of Regression Analyses for the Relationships between Type of Blogging and Potential Intervening Variables</td>
<td>121</td>
</tr>
<tr>
<td>Table 5.</td>
<td>Summary Table of Regression Analyses for the Relationships between Potential Intervening Variables and Psychological Empowerment</td>
<td>122</td>
</tr>
<tr>
<td>Table 6.</td>
<td>Summary Table of Regression Analyses for the Relationships between Motivations for Blogging and Psychological Empowerment</td>
<td>123</td>
</tr>
<tr>
<td>Table 7.</td>
<td>Summary Table of Regression Analyses for the Relationships between Motivations for Blogging and Potential Intervening Variables</td>
<td>124</td>
</tr>
<tr>
<td>Table 8.</td>
<td>Summary Table of Regression Analyses for the Relationships between Blogging Experience and Psychological Empowerment</td>
<td>125</td>
</tr>
<tr>
<td>Table 9.</td>
<td>Summary Table of Regression Analyses for the Relationships between Blogging Experience and Potential Intervening Variables</td>
<td>126</td>
</tr>
<tr>
<td>Table 10.</td>
<td>Summary Description of Experimental Design</td>
<td>127</td>
</tr>
<tr>
<td>Table 11.</td>
<td>Factor Loadings Using Principal Components and Varimax Rotation for Empowerment Scale (Full-Factorial Experiment)</td>
<td>128</td>
</tr>
</tbody>
</table>
Table 12. Factor Loadings Using Principal Components and Varimax Rotation for Empowerment Scale (Journaling Experiment)……………………………… 129

Table 13. Regression Analysis for the Relationship between Potential Intervening Variables and Sense of Influence……………………………………………… 130

Table 14. Summary of Regression Analyses for the Relationship between Potential Intervening Variables and Psychological Empowerment……….. 131
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Introduction

The rhetoric surrounding new media has often centered on the claim that the new communication technologies made possible by the advent of the Internet serve to empower users (Mehra, Merkel, & Bishop, 2004; Mitra, 2004, 2005; Spears & Lea, 1994). On the one hand, these emergent technologies appear to revolve around and celebrate the individual user, as most apparent in personal homepages and web portals (Kalyanaraman & Sundar, 2006; Sundar, 2006). On the other hand, they are lauded for their ability to transcend space and time and to afford individuals all the benefits of communities, as most apparent in chatrooms, listservs and discussion forums (Reid, 1991; Rheingold, 2000). Recent developments in the new media landscape have brought about Weblogs (or blogs) with a renewed and promising potential to amplify this empowering effect (Blood, 2000; Herring et al., 2004).

A hybrid genre incorporating unfettered self-expression and community-building functions at the same time (Miller & Sheperd, 2004), blogs have been rapidly and extensively embraced by millions of users – lay individuals and professionals alike – in a myriad of domains: journalism (Carroll, 2004; Gallo, 2004), campaign and corporate communication (Kelleher & Miller, 2006; Lawson-Border & Kirk, 2005), and education (Godwin-Jones, 2003), among others. Several scholars have attributed the rapid diffusion of blogging technology to its potential for empowerment (e.g., Blood, 2000; Herring et al., 2004). But, this much-touted potential is yet to be empirically examined.

The central purpose of this dissertation is to make a contribution in this regard by directly testing the empowering potential of this immensely popular
mode of communication. Such an endeavor is undoubtedly most beneficial to disempowered, underprivileged groups in society (e.g., women); therefore, the focus of the present dissertation will be centered specifically on women. In an era when gender digital divides are rapidly closing (National Telecommunications and Information Administration, 2002), with women as prominent as men in their use of computers and the Internet, yet still often misportrayed in mainstream media discourses and underrepresented in the public sphere (Gallagher, 2003; hooks, 1996; Fraser, 1992), it becomes important to document the ways in which women may become psychologically empowered to feel they can influence and adjust these realities through the use of more inclusionary new technologies (e.g., blogs). Consistent with extant conceptualizations, psychological empowerment is defined here as pertaining to aspects of mastery and control over aspects of one’s life, perceived ability to effect change, and connectedness (Shields, 1995; Zimmerman, 1995). Theoretical mechanisms involved in eliciting psychological empowerment are also explored.

The present dissertation argues that one of the primary reasons for the empowering potential of blogs may lie in their versatile nature as a communication tool (Blood, 2000). Technically blogs incorporate elements of human-computer interaction (HCI) as apparent in their resemblance to personal homepages, as well as aspects of computer-mediated communication (CMC) as manifest in their ability to foster interactions among users at the same time, (Herring et al., 2004). As a result, blogs hold promise of far-reaching psychological empowerment potential for users, as detailed in what follows.
As an HCI technology, some of these implications point to a heightened prominence of the self (Herring et al., 2004; Sundar, 2006). In the act of creating and maintaining a blog, the self (i.e., the blog author or blogger) becomes a sender or source of communication (Papacharissi, 2006; Sundar, 2006). The constant activity of blogging itself serves to further boost one’s competence as a creator and as a distinct voice, most likely imbuing users with a deeper sense of agency. Considered in this light, blogs become a powerful vehicle for self-expression, for developing and mastering one’s voice – be it through constructing highly personal narratives around one’s life experiences, or through pointed commentary on various social, political, or scientific topics. In light of women’s frequent under- and misrepresentation in mainstream media discourses (Gallagher, 2003; hooks, 1996), the ability to gain control over one’s voice and representation fostered by blogging offers one plausible route to their psychological empowerment.

Not only do blogs allow users to express and assert themselves, but they also enable them to relate their voice to that of others in the process. In addition to being a HCI technology, blogs are also a collaborative CMC technology embedding commenting and feedback functions, which serve to foster connectedness (Blood, 2000; Herring et al., 2004). In this regard, they can be thought of as virtual communities (Blanchard, 2004). Bloggers can—and often do—initiate a public dialogue with others, with a likely outcome being a strong sense of community (Blanchard, 2004; Herring et al., 2004; Nardi et al., 2004). Considering that women’s presence and participation in the public sphere has
been historically insufficient (Fraser, 1992), the ability to create public dialogues and build communities via blogs can be psychologically quite empowering.

Various functions (e.g., agentic self-assertion and community-building) that were previously served by distinct communication technologies (e.g., homepages, and chatrooms respectively) are now accommodated within the same communication medium, likely making blogs all the more empowering. Theoretically, this versatility of blogs raises questions about the mechanisms by which blogs have psychological impact. The empowering potential of blogs discussed earlier could be due to the fact that women derive a strong sense of agency (i.e., becoming content creators with a distinct voice). Or it could be because they derive a deep sense of community (i.e., entering public dialogues with others). Or both.

In light of the above, the present dissertation attempts to bring a contribution by empirically examining the potential of blogging to imbue a sense of psychological empowerment in women as a traditionally underprivileged and marginalized group in society. It will also attempt to unpack this relationship, by locating possible theoretical mechanisms at play. Because it is in the active process of blogging that this empowering potential resides most obviously, the focus of examination here will rest entirely on bloggers, as opposed to blog readers. Given the underlying assumption that psychological empowerment resulting from the use of a communication technology is currently best realized via blogging, the present dissertation will first explicate blogs, then review prior literature pertaining to their potential empowering effects, suggest two possible theoretical psychological mechanisms, and formulate a series of research
questions and hypotheses. It will then describe the methods and results of two studies designed to answer the research questions and test the hypotheses. Finally, it will discuss the findings by underlining their theoretical and practical implications, noting possible limitations and suggesting directions for further research.

Literature Review

Blogs

Broadly and inclusively defined as “frequently modified web pages in which dated entries are listed in reverse chronological order” (Herring, Scheidt, Bonus, & Wright, 2004, p. 1), blogs have become one of the most popular online communication tools in recent times, witnessing exponential increases in adoption and usage rates in the past few years.

Currently tracking 81.9 million blogs (up from 4.2 million in October 2004), reputed blog search engine Technorati reports 175,000 new blogs being created every day (as of May 2007). Pew Internet Research (2006) further revealed a significant increase in readership of blogs from the previous year, with 39% of Internet users reporting reading blogs as part of their online activities.

The surge in the use and popularity of blogs can be explained by at least two factors. First, blogs are typically cost-free and easy to use. While the first people to “log” an entry to their homepages back in the early ‘90s had to hand-code their sites (Blood, 2000; Du & Wagner, 2006), most bloggers these days employ blogging platforms such as Blogger, TypePad, or WordPress, to generate cost-free and ready-to-use editable blog templates in a matter of minutes. Thus,
with little or no technical skills, anybody with access to the Internet can become part of the world of blogs, that is, the blogosphere (Du & Wagner, 2006). In this sense, blogs can be viewed as a technology of truly equalizing potential, bypassing the need for any technological skills for those who want to speak and be heard.

Another important contributor to the flourishing popularity of blogs lies in their highly flexible and accommodating nature as a communication medium (Blood, 2000; boyd, 2006; Miller & Sheperd, 2004).

On the one hand, blogs are quite malleable with respect to the content they can accommodate (Blood, 2000), characterized by many as a “hybrid genre” situated at the intersection of the private and the public (Mortensen & Walker, 2002; Miller & Sheperd, 2004).

As a “private,” personal tool, blogs have been most often likened to personal diaries. Just like offline journals, blogs may serve as a venue for highly personal self-expression (Blood, 2005; Herring et al., 2004) and self-exploration (Nardi et al., 2004; Sundar et al., 2006). Given the relatively high degree of self-disclosure inherent in such personal narratives, these types of blogs are typically intended for a small audience, composed most likely of people who are known to the blogger (Henning, 2003; Nardi et al., 2004).

As a “public” mass communication tool, blogs serve as an outlet for various types of expertise to reach the larger public (Blood, 2000). Most notably, these blogs have been embraced by professional journalists and lay people alike, for the proliferation of social and political commentary. Some of these blogs, such as the Huffington Post, Instapundit, Daily Kos, and Crooks & Liars, have
been a constant presence on the blog A-list in recent years (Technorati.com). Unlike personal blogs, these are mostly aimed at reaching as large of an audience as possible, approximating the one-to-many dynamic of traditional mass communication media (Harp & Tremayne, 2006).

While in reality most blogs are a mixture of “private,” personal content and public-spirited pontifications, they can be classified as belonging to one of two formats: “personal journals” (i.e., focused mainly on bloggers’ personal thoughts and internal workings) or “filter blogs” (i.e., centered on events external to the blogger, for example social or political events) (see Blood, 2000; Herring et al., 2004).

Additionally, the technological affordances proffered by blogs come to further reinforce their flexible and accommodating nature. Irrespective of their format and the type of content they encourage, structurally blogs are evocative of HCI and asynchronous CMC technologies alike, by incorporating elements of both (Herring et al., 2004). HCI refers to the “dialogue” between people (users) and computers (interfaces). The creation of a blog as well as the ongoing activity of blogging arise from a such a dialogue, reminiscent of the one involved in developing a personal homepage. Further similar to homepages, in the realm of blogs this dialogue is centered around and dictated by the blogger, encouraging the on-going expression of her personal voice.

CMC, on the other hand, refers to the dialogue that occurs between two or more individuals via computer-mediated formats. Embedding both older formats like e-mail and newer ones like commenting (allows blog readers to react to blog content written by blog authors), trackbacks (allow bloggers to see who
has seen their original posts and has written other entries relating to them), and permalinks (enable anybody who has a website to link to and reference a certain blog post), blogs are also an example of a CMC technology. The dialogue created via the CMC functions of blogs encourages connectedness and community building, albeit still dictated by the blogger. That is, while most blogs allow for readers to comment and provide feedback, it is the blogger that ultimately dictates the content of her blog, blog audiences being mainly responsive (boyd, 2006).

Considering the highly customizable structural and content-related features of blogs, it becomes reasonable to assume they also accommodate multi-purpose uses. In fact, the scant available research on blogs suggests that blogs have been adopted not only in multiple domains (Carroll, 2004; Godwin-Jones, 2003; Kelleher & Miller, 2006; Lawsons-Border & Kirk, 2005), but also for multiple individual motivations (e.g., Nardi et al., 2004; Papacharissi, 2006; Sundar et al., 2006).

Why do People Blog?

There is little evidence to date to suggest a clear typology of motivations particular to blogging. Certain patterns have emerged, however, with studies suggesting a number of motivations that appear to converge towards a few themes – blogging to provide commentary, blogging to bring about social change, blogging to connect, blogging to construct identity, and blogging to cope (see Kaye, 2006; Nardi et al., 2004; Papacharissi, 2006; Sundar et al., 2006; Trammell & Keshelashvili, 2005). In light of the above blog classification, it has been shown that personal journals are typically adopted for purposes of
therapeutic coping and constructing identity (e.g., Sundar, 2006, Trammell & Keshelashvili, 2005), while filter blogs have been most often embraced as vehicles to provide commentary and bring about social change (e.g., Kaye, 2006).

While far from comprehensive, the foregoing evidence makes it possible to suggest that due to the ability of blogs to accommodate diverse individual needs, people likely proactively utilize them as vehicles for pursuing personal motivations. In fact, the Uses and Gratifications paradigm of media effects research (Blumler & Katz, 1974; Rubin, 1984) has long emphasized the ability to shape media communications, assuming a “highly active, highly selective audience, manipulating, rather than manipulated” (Schramm, 1971, p. 8). This ability is said to emerge from highly motivated selection and consumption of media fare. As the epitome of user-centered communication technologies, blogs may enable users to mold communications based on their personal needs and motivations more than any other medium before. Clearly, it is impossible to envision blogs as separate from user activity, blogs as a medium existing solely by virtue of their authors’ activity, intentions and personal motivations.

Considered in this light, as boyd (2006) has suggested, blogs are perhaps the best illustration of McLuhan’s idea (1964) that communication media can be seen as the “extension of man.” “Blogs are precisely this; they allow people to extend themselves into a networked digital environment that is often thought to be disembodying. The blog becomes both the digital body as well as the medium through which bloggers express themselves” (boyd, 2006, p. 11).

The preceding discussion points not only to reasons for the burgeoning popularity of blogs but also to their seemingly inherent empowering nature. For
one thing, blogs accommodate any type of content. Moreover, they can serve as a tool for interpersonal communication as well as approximate the feel of mass communication. Due to these multifaceted aspects of blogs, they can be steered by users’ motivations to gratify personal needs and wants. Finally, given their free access and ease of use, they can be created and maintained with practically no skills by virtually anybody. While the above is likely already promising, in order to better understand the empowering potential of blogs, we first need to determine who are the people currently attracted to this technology. In other words, are there particular classes of people who are attracted to this technology, or is it a medium that attracts usage from all walks of life? This becomes a particularly meaningful question if we consider that this promising empowering potential of blogs would clearly prove most beneficial to the disempowered.

Who Blogs?

Scholarly research is in its incipient stages in describing the demographic make-up of the blogosphere. Several patterns have surfaced, however, mainly with regard to the gender composition of the blogger population. Most current accounts documenting blog authorship by gender have relatively unanimously concluded that the blogosphere is quite balanced overall, with only a slightly larger proportion of male bloggers than female bloggers (Harp & Tremayne, 2006; Herring et al., 2004; Viégas, 2005).

There appears to be a dearth of research examining the breakdown of the blogger population by ethnicity and a seeming lack of data about bloggers’ sexual orientation. This makes it extremely difficult to estimate the presence of the marginalized in the blogosphere, other than women, and to assess the degree
to which these groups have appropriated this communication tool. The few extant reports indicate, however, that at least in terms of ethnicity, the world of blogs is overwhelmingly “White” (McKenna & Pole, 2006; Viégas, 2005).

While far from comprehensive, these initial reports seem to indicate that women (probably mostly white) may be the only fairly proportionally represented marginalized, disempowered group in the blogosphere. The previous discussion of blogs, however, suggests that blogs and blogging may provide a fruitful avenue for personal empowerment.

Psychological Empowerment

Understanding empowerment demands that we first address its core, that is, the idea of power. Furthermore, as some have suggested before (Page & Czuba, 1999), the possibility of empowerment rests on very specific notions of power. That is, the possibility of empowerment needs to transgress conceptualizations of power as an intrinsic personal characteristic, and therefore immutable, as some early theorists have defined it (Dahl, 1957; French & Raven, 1959). Necessarily, empowerment can only be built on notions of power that are variable and contextual, which imply its ability to shift, change and expand (Page & Czuba, 1999).

For example, most contemporary social psychologists situate power contextually (Emerson, 1962; Dépret & Fiske, 1993; Keltner, Gruenfeld, & Anderson, 2003). Moreover, starting from the premise that people feel frequently powerful or powerless in the absence of observable behavior (Keltner et al., 2003), the majority of contemporary social psychological research sees power as a property of social relations rather than an attribute of individuals. As Emerson
(1962) suggested, “to say that ‘X has power’ is vacant, unless we specify ‘over whom’.” (p. 32). Social psychological research, therefore, seems to typically adopt a power over approach in defining the construct. The notions of dominance and oppression become apparent in the consequences of enacting power from this perspective.

While still seeing power as a process that occurs in relationships, feminists and clinical psychologists, on the other hand, define the concept as power to, i.e., “the enactment of goal-directed behaviors that respect the rights of all parties in an interaction” (Enns, 2004). From this perspective, therefore, it appears that power refers more to a sense of self-efficacy and control over one’s life outcomes, incorporating, at the same time, a sense of personal responsibility and sensitivity towards others. Other feminists and clinical psychologists have located power within, referring to the feelings of inner strength that enable one to make sound decisions (Enns, 2004). In this sense, power implies control, again, but also perhaps the perceived sense of competence. Lastly, other feminist theorists have located power within the community (Miller, 1976; Kreisberg, 1992; Bookman & Morgen, 1984), by characterizing power as collaboration, sharing and mutuality. This leads to the formulation of a distinct type of power, i.e., power with (Kreisberg, 1992; Robertson & Minkler, 1994) (also see Rowlands, 1997).

Given the focus of the present dissertation, i.e. to gauge the role of blogging in imbuing women with a deep sense of psychological empowerment that eschews boss-subordinate, parent-child, and other similar dynamics and therefore power over approaches, it appears that conceptualizations such as power to, power within and power with can prove perhaps most appropriate. As Enns
(2004) noted in discussing feminist theories and psychotherapies, “women often express discomfort with the term power because of their limited experience with power or their exposure to only aggressive or forceful aspects of power” (p. 39). In this respect, she further suggests, one step towards empowerment consists in differentiating between power as coercion, and power as information, knowledge, reciprocal influence, etc. (Enns, 2004).

Mirroring the nuanced conceptualizations of power, definitions of empowerment abound as well, characterized perhaps by lack of theoretical clarity. As many have noted, when it comes to empowerment, it is easier to define the absence of it than defining it positively (Rappaport, 1984; Zimmerman, 1990).

For a clear theorizing about empowerment, Aithal (1999) suggests that distinctions between its cognitive, economical, political and psychological aspects must first be made. Cognitive aspects are said to involve knowing one’s fundamental rights and learning the ways to become more empowered. Economical aspects of empowerment point to financial and other economic disparities and dependency, while the political aspect involves the ability to understand a certain situation from a socio-political perspective. Finally, psychological aspects of empowerment pertain to the feeling that one can make a successful contribution to improve their situation (see Aithal, 1999). While these four aspects are clearly intertwined to some extent, it is mainly the psychological facet of empowerment that constitutes the focus of the present dissertation.

Conceptualized this way, it is community psychologists that have most notably and extensively explored the concept, which they have labeled as
“psychological empowerment.” Defined as the process by which individuals gain mastery over issues of concern to them (Rappaport, 1984, 1987), psychological empowerment couches three main components (Zimmerman, 1995). The first, the intrapersonal component, refers to processes by which people may achieve domain-specific perceived control and self-efficacy elements (e.g., feelings that one can bring about social change), perceived competence and mastery. The second, the interactional component, pertains to people’s understanding of their community and how one can effect change. Finally, the behavioral component refers to the actions people take to directly influence outcomes (e.g., empowerment behaviors for victims of sexual abuse could be to blog either about their experiences and/or about combating sexual abuse, in a dialogue with others). Empowered outcomes, on the other hand, are consequences of these empowering processes, and point to feelings of mastery and control, resource mobilization and participation (Zimmerman, 1995).

The empowerment construct has also been central to the feminist scholarship, which has attempted to specifically determine the ways in which women, as a traditionally low-power, marginalized group in society, can achieve it. Prescriptions for empowerment abound, however common themes can be extracted. In her discussion of Black women’s empowerment, Collins (2000) capitalizes on knowledge (including self-knowledge) and organizing/participation. Also from a feminist theory perspective, Shields (1995) conducted an exploratory study examining women’s perception of the meaning of empowerment in their lives. Based on analyses of fifteen in-depth interviews, empowerment emerged as a multidimensional construct, centered around three
main themes: the sense of a well-developed internal self, knowledge and competence to take action in accord with this internal self of sense, and connectedness. Similarly, feminist clinical psychology and therapy (see Enns, 2004; Worrell, 2001) have capitalized on women’s assertiveness, the ability to use personal and community resources, and the sense of personal competence as integral elements of personal empowerment.

**Blogging and Psychological Empowerment**

The Internet has long been applauded for its empowering potential ever since its widespread use as a communication venue (Lea & Spears, 1991; Mitra, 2004, 2005; Siddiquee & Kagan, 2006; Mehra, Merkel & Bishop, 2004). In fact, various aspects of the Internet have been shown to be empowering to several marginalized populations: women (Siddiquee & Kagan, 2006), sexual minorities (Mehra, Merkel & Bishop, 2004), ethnic minorities (Mehra, Merkel & Bishop, 2004; Siddiquee & Kagan, 2006) and immigrants (Mitra, 2005), among others. While some have emphasized the Internet’s ability to accommodate marginalized voices (Mitra, 2005), others have capitalized on its community-building functions (Pinkett & O’Bryant, 2003; Siddiquee & Kagan, 2006).

As a technology that affords unfettered self-expression in a manner that personal diaries do, encourage opinionated social, political, and other types of commentary, as well as foster community-building and dialogue, it becomes possible to discern multiple possible ways in which blogs could empower the marginalized: by boosting their sense of inner strength and control (i.e., power within), enabling them to enact goal-directed communication acts (i.e., power to), as well as collaborate and share – be it with regard to information, expertise, or
personal experiences – with others and derive a sense of collective power (i.e., power with). In light of this reasoning, the way psychological empowerment is conceptualized in the present dissertation points to themes of mastery and control over aspects of one’s life, perceived ability to effect change, and connectedness.

On a final note, psychological empowerment is deemed to “take on a different form in different people and contexts” (Zimmerman, 1995). That is, psychological empowerment varies from person to person and across contexts and life domains, as well as fluctuates over time. In this respect, it may be assumed that blogging provides one very specific, contextual venue for acquiring psychological empowerment, by providing those who have been marginalized in mainstream media discourses with both the means to assert their own voice (i.e., acquire a sense of agency), as well as connect with others (i.e., develop a sense of community). Thus, psychological empowerment may not be a direct outcome of the blogging activity itself, but rather triggered by the most immediate outcomes of this activity, i.e., sense of community and sense of agency.

Sense of Community

“[W]henever a CMC technology becomes available to people anywhere, they inevitably build virtual communities with it, just as microorganisms inevitably create colonies.”

(Rheingold, 2000, p. 6)

As CMC theorists have long posited, the synchronous (e.g., chat-rooms, instant messaging) and asynchronous (e.g., e-mail, listservs) affordances offered by various Internet communication technologies, foster and encourage the emergence of virtual communities. In particular, the social identity model of
Deindividuation effects (SIDE) (Lea and Spears, 1991) suggests that despite the lack of visual and non-verbal cues in online environments, mediated group formations are still very real to their members. Derived from social identity theory (Tajfel, 1978) – i.e., that individuals have multiple possible selves that become more or less salient depending on the context, and deindividuation theory (Zimbardo, 1969) – i.e., submergence of individuals in a group or crowd leads to a loss of identity and weakening of social norms, SIDE suggests that while deindividuation does indeed lead to a decreased focus on personal identity, at the same time it reinforces group salience (Spears & Lea, 1994; Lee & Nass, 2002).

Indeed, abundant extant research comes to corroborate this position, suggesting that by providing a common venue which transcends space and time for people with similar interests, the Internet is a perfectly viable venue for community-building through its synchronous and asynchronous interaction capabilities (Baym, 1997; Reid, 1991; Rheingold, 2000; Sproull & Kiesler, 1991; Wellman, 2001). Furthermore, research has shown that virtual communities may serve to replace relationships lost in the physical world (Rheingold, 2000), allow people to form new friendships (Katz, Rice & Aspden, 2001) and connect with similar others around the world (Roberts, Smith, & Pollock, 2002), increase involvement with face-to-face (FtF) communities, as well as boost democratic participation and community activism (see Blanchard, 2004).

As apparent in the preceding paragraphs, while older CMC technologies were capable of providing users with the necessary tools to create and reap the benefits of virtual communities, blogs open up the possibilities of community building invaluably, by enabling anybody, potentially, to become an integral part
of them, as opposed to the more esoteric nature of highly specific chatrooms and bulletin boards, for example. In fact, although still rather scant, extant research on blogs has already singled out their community-building potential (Blood, 2004; Herring et al., 2004; Nardi et al., 2004; Lampa, 2004), as well as the fact that people choose to blog with the primary motivation of connecting with others (Sundar et al., 2006).

Defining (virtual) community. Despite the fact that there has been a lot of hype surrounding communities and virtual communities, defining them has resulted in a fair amount of debate (see Blanchard, 2004; Bess, Fisher, Sonn & Bishop, 2002; Porter, 2004). In as early as 1955, rural sociologist Hillery compiled a list of no less than ninety-four different definitions of community (as cited in Bess, Fisher, Sonn, & Bishop, 2002). While full consensus was never reached, most contemporary views of community favor a postmodernist stance, suggesting that, like most other social phenomena, community is a highly fluid and flexible concept that is socially constructed. Just like geographical or physical communities, virtual ones have also been characterized as socially constructed, emerging from shared communication and interaction (see Roberts, Smith, & Pollock, 2002) and interactions between their members are assumed to be mediated by computer technologies either fully (Preece, 2000), or at least partially (Porter, 2004).

Social psychologists (community psychologists, in particular), however, have argued that focusing on the psychological experience of community rather than its structure is perhaps more important, especially in contemporary industrial society which encourages a high dose of individualism and its darker
sides – alienation and despair (Dalton, Elias, & Wandersman, 2001). Thus, instead of concerning themselves with the dynamics surrounding community structure and formation, community psychologists examine individuals’ psychological relationship (i.e., cognitive, affective, conative) to a given community and its members, that is, their sense of community. Examining SOC, rather than the structure of a community per se, becomes all the more important in virtual environments, given their problematic “locatability”. Unlike physical communities, virtual ones are more dynamic in nature and are based primarily on shared values and interests rather than shared geographical location (Roberts, Smith, & Pollock, 2002; Wellman & Giulia, 1999). As a result, it becomes imperative that virtual communities are examined more in relation to their spirit than otherwise.

According to the most well-established contemporary theoretical framework (McMillan & Chavis, 1986), SOC is “a feeling that members have of belonging, a feeling that members matter to one another and to the group, and a shared faith that a member’s needs will be met through their commitment to be together” (p. 9). In line with this conceptualization, McMillan and Chavis (1986) identified four distinct components of SOC: membership, influence, integration and fulfillment of needs, as well as shared emotional connection. These four components have also been translated into empirical measurement, embedded in the Sense of Community Index (SCI) (McMillan & Chavis, 1986).

While research on virtual communities has only seldom examined SOC directly (Blanchard, 2004), findings suggests that some of its components have been shown to manifest themselves to various extents in several such
environments: IRC (Internet Relay Chat), MUDs (Multi-User Dungeons), MOOs (Multi-User Dungeons, Object Oriented), e-mail discussion groups, bulletin boards, computer-supported distance learning programs, online support groups, and newsgroups (see Roberts, Smith, & Pollock, 2002), as well as portals (Kalyanaraman & Sundar, 2006).

Although there is only one scholarly article to date reporting findings with respect to the presence of SOC in blogs – rather weak, according to its author (Blanchard, 2004), it is posited here that blogging is capable to foster a rich sense of community in its users (i.e., bloggers). In an article titled “Sense of Community Motivates You to Work for Free” by Mark Glaser (2006) of PBS, the driving force behind bloggers’ free contributions to the vast array of web content lies in the immense gratification that the dialogue formed around the blog offers to its users. As one blogger cited in the article put it, “My pay? Comments. Comments and feedback are the currency of blogging in my opinion. Comments and that precious link-love” (Glaser, 2006).

Taking this anecdotal and scholarly evidence into account, and going back to McMillan & Chavis’ (1986) SOC framework, it becomes reasonable to surmise that blogs are quite capable of instilling SOC in users via its four components.

The first of these, membership refers to feelings of belongingness and affinity to a given group, community. One important element of membership consists of boundaries that are enforced between members. Access to blogs is open to all. However, “membership” in blog communities is most likely demarcated by the topic of a blog. For example, in a personal blog where the author focuses on personal mental health problems, “membership” is
delimited by interest in mental health problems. In a filter blog where the author focuses on exposing biases in mainstream media, “membership” is determined by others’ interest in the same topic. Thus, formed around topics, blog community members most likely develop a great degree of belongingness and affinity to their group.

The second SOC component, *influence*, points to the perceived feelings of influence over the workings of a community and the reverse perception of the influence a community has over the individual. As actors with full control over the content of their blog (boyd, 2006), bloggers get to set the tone for whatever dialogues may be sparked around it. Additionally, most bloggers are able to moderate and filter unwanted comments received from readers. In this sense, the blog technology enables bloggers to directly shape the sense of community they can derive from its use. At the same time, readers’ reactions may in turn influence the authors’ blogging activity. It is possible to imagine that readers’ reactions may determine the blogger to post entries more often, as well as dictate some of the blog entries’ posts. This way, the feelings of influence become bi-directional, as posited by McMillan & Chavis (1986).

Third, *integration and fulfillment of needs* pertains to the experience of shared values and feelings of reinforcement and support derived from membership in a community. As a tool for self-expression primarily (Trammell & Keshelashvili, 2005), blogs are believed to serve to fulfill individual needs (Nardi et al., 2004; Sundar et al., 2006). As a *public* tool for self-expression, that is, different from personal diaries, blogs are available for potentially anyone who shares bloggers’ values and needs, which may bridge connection. In fact,
research has already shown that when it comes to blogs “birds of a feather flock together,” in that most blog audiences are fairly homogenous (Lampa, 2004; Nardi et al., 2004).

To sum it up, another blogger cited in the same PBS article, puts it very eloquently: “That’s really what it comes down to: (...) The reward in blogging pro-bono is to find those that you can relate with beyond your own limited set of experiences, beyond your limited range of knowledge, and to create a whole that is much more stronger and longer lasting than its parts” (Glaser, 2006).

Lastly, shared emotional connection relates mostly to a shared history whereby members of a community share events and experiences, be they positive or negative. First and foremost, it is highly likely that bloggers and followers of a given blog may feel they share a binding common environment, a common outlet for expression. As a tool that encourages self-disclosure (Trammell & Keshelashvili, 2005), which at times can take highly personal tones, blogs also become a perfect venue for sharing personal events and experiences for both bloggers and readers. Further, as a social interaction tool, it is not uncommon for bloggers and readers to form more personal relationships (i.e., friendships).

Following McMillan & Chavis (1986) many have contended SOC is a positive end state in its own right, indicative of a strong, healthy community, yet others have theorized that its experience may lead to other positive or negative outcomes (see Bess et al., 2002).

It is proposed here that experiencing feelings of membership, belonging, fulfillment and integration of needs, as well as a shared emotional connection as
a result of blogging, may serve to confer validation and reinforcement to previously silent, marginalized voices as well as a more defined sense of personal leverage in various aspects of one’s life. In her history of weblogs, Blood (2000) suggested that “[t]he blogger, by virtue of simply writing down whatever is on his mind, will be confronted with his own thoughts and opinions. (…) A community of 100 or 20 or 3 people may spring up around the public records of his thoughts. Being met with friendly voices, he may gain more confidence in his view of the world; he may begin to experiment with longer forms of writing, to play with haiku, or to begin a creative project – one that he could have dismissed as being inconsequential or doubted he could complete only a few months before.” In conclusion, this discussion points to the possibility that blogging psychologically empowers individual users by way of this community-building and validation function.

The link between sense of community and empowerment is not a hard one to envision. The constant validation bloggers are likely to receive from their smaller or larger community of readers may to lead to a deeper sense of psychological empowerment. Moreover, by choosing to participate in a public forum inviting connection and community building, bloggers may feel a strong sense of community fairly instantly. As Lampa (2004) suggested, blogs make the notion of “imagined community” become a powerful psychological tool. The blogosphere has been said to reside “in the mind of the individual blogger as an online imagined community resulting from the shared experience of instant publishing” (Lampa, 2004, p. 1). Be it real or imagined, sense of community is very likely a precursor to psychological empowerment. In fact, Chavis and
Wandersman (1990) showed that the experience of sense of community is directly linked to various empowered outcomes, among which perceptions of mastery and control. Just as it is proposed here, sense of community functioned in their study as a mediator between participation and empowerment. As already alluded to, the blogging activity can be considered to be the participatory/behavioral component of empowerment (see Zimmermann, 1990). Finally, the role of community in bringing about “social power” is further captured by Putnam’s (1995, 2000) perspective on “social capital,” referring to the connections and social networks among individuals and their rich implications for individuals and communities alike.

Sense of Agency

“In composing my link text every day I carefully considered my own opinions and ideas, and I began to feel that my perspective was unique and important.”

(Blood, 2000)

Viewed with the lens of HCI, blogs are no more than customizable personal homepages, which invite an ongoing user-machine dialogue. Users request, machines/interfaces cater, responding to individual specifications. The locus of control is placed within the user, and the crux of this ability to customize online content and communication exchanges, points to the importance of the self as a creator, that is, “self as source” (Sundar, 2006).

First and foremost, the conceptualization of “self as source” points to the psychological blur between senders and receivers created by the advent of the Internet and many of its applications (Singer, 1998; Sundar & Nass, 2001). Not only can Internet users be thought of as traditional receivers of communication (as in recipients of various newsletters, for example), but also as gatekeepers (as
in online news selection, for instance, using a search engine such as Google News), and content creators (as most apparent in blogs), therefore as sources of communication. As the agency model of customization (Sundar, 2006) also suggests, this conceptualization of the “self as source” imbues individual users with a strong sense of personal agency, and serves to mediate the relationship between various technological affordances and several psychological outcomes. One of these technological affordances is interactivity. As a HCI technology, blogs exhibit interactivity in the degree to which they allow the user (i.e., blogger) to become a creator, a source of content. As a medium that comes to exist only by virtue of the content put forth by their author, blogs are in this sense highly interactive. Moreover, continued mastery over the blog’s creation, as well as the interactions surrounding it, are likely to ultimately translate into a more pronounced sense of control over one’s voice for bloggers.

By providing a space for chronologically compiling one’s thoughts (be they highly personal or otherwise), blogs allow for individual voices to be developed, refined and mastered. As others have implied before, this works disproportionately for bloggers and blog readers, the blogger being in the position of supreme control over the narrative constructed in her blog, and therefore over her own voice (Herring et al., 2004). Moreover, it can be assumed that these voices are likely to gain even more potency given the medium’s ability to launch them publicly and make it possible for these voices to indiscriminately be heard potentially by masses of people, in a way that was never conceivable with one-way traditional media outlets before.
This specific conceptualization of agency as voice is not a new one to communication scholarship. As Mitra (2004) has suggested before, agency as voice means that “the speaker can take on the position of the speaking agent to produce a specific voice for him- or herself” (p. 493), once the agent finds a space to materialize his or her voice (Watts, 2001, as cited in Mitra, 2004). As primarily vehicles of self-expression, blogs can undoubtedly provide a space to materialize one’s voice. But how does producing a voice for oneself make one more agentic?

Defining Agency. Before addressing this question, there is need for one conceptual clarification. Just as in the case of community, the focus of the present dissertation is not so much on one’s actual level of agency per se, but on the psychological sense of agency, that is, perceptions of one’s own agency.

According to Bandura’s (1986, 2001) social-cognitive theory of agency, at the core of human agency lies one’s ability to intentionally influence one’s functioning and life circumstances (Bandura, 2006). “[I]n acting as an agent, an individual makes causal contributions to the course of events” (Bandura, 2006, p. 166). In this sense, he distinguishes intentions and intentionality from mere expectations and predictions of outcomes, intentionality presupposing proactive commitment to elicit and bring about those outcomes.

Transferring these ideas to the realm of blogging, we may view one’s constant act of constructing and asserting one’s voice as a direct manifestation of the willingness to influence one’s functioning and life circumstances. It is only through voicing oneself and intentional assertion that this sort of influence over who one is (i.e., one’s functioning) and events that may affect that (i.e., life circumstances) can take shape. It is only through voicing oneself (i.e., self-
expression) that people can become truly agentic, “contributors to their life circumstances, not just products of them” (Bandura, 2006, p. 164). Furthermore, Bandura (1986, 2001) suggests that self-efficacy, that is, people’s trust in their powers to produce certain effects by one’s outcomes, is perhaps the most central mechanism of human agency. By expressing one’s voice on various events – personal, social, political, or otherwise – blogging becomes a vehicle for people to assert and constantly develop their sense of self-efficacy, as well as become confident in who they are and what they can do (Blood, 2000). Bloggers themselves recognize this potential and some state their intentions and reasons behind blogging very clearly: “I work to do good...because I care...because I believe in making a difference and leaving this world slightly changed for the better” (Glaser, 2006).

Returning to the original question, it becomes possible to theorize that the continuous expression and refinement of one’s voice may contribute to enhance one’s sense of competence, confidence and assertiveness1 – three core agentic attributes as identified by the social role theory of gender stereotypes (Eagly, 1987; Eagly, Wood, & Diekman, 2000).

Moreover, while a desirable end state in itself, the ability to become an agent with a distinct voice has been suggested to have far-reaching consequences (Mitra, 2005). Going back to Sundar’s agency model of customization (2006) seems to agree with this stance, suggesting that the sense of personal agency

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1 Social role theory (Eagly, 1987) suggests that women are most often characterized as communal (i.e., nurturant, affectionate, warm) and men as agentic (i.e., competent, confident, assertive) based on the typical social roles they inhabit, especially those concerning the division of labor.
inculcated in users by way of becoming sources of communication has in turn rich psychological implications (cognitive, affective, behavioral). In line with these positions and as based on the above discussion of agency, it is suggested here that the acquisition of a distinct voice enabled by blogging technologies, and therefore of personal agency, is ultimately psychologically empowering.

The link between sense of agency and psychological empowerment is in fact easily conceivable. When conceptualized as control over one’s voice, the agency-empowerment connection is powerfully reminiscent of Freire’s (1973) notion of “conscientização,” which focuses on individuals becoming subjects with a critical consciousness and a voice of their own. In his view, it is by escaping the so-called “cultures of silence” that people become truly empowered. While his prescription was aimed at increasing the rate of literacy, technological advances make it possible to apply his ideas to environments that discourage “cultures of silence” and revolve around literacy. In a similar vein, most contemporary feminist therapies and psychotherapies integrate strong assertiveness-building components in empowerment training (Worrell, 2001). It is by voicing themselves that women are encouraged to come to grips with notions of power in healthy and productive ways (Enns, 2004). Furthermore, voices produce narratives, and narratives provide an important source for empowerment (Rappaport, 2000). Lastly, by conceptualizing agency as voice, we can think of blogging as an effort to gain control over this voice. In his “model of learned hopefulness,” Zimmermann (1990) posits that efforts to exert control may increase one’s sense of psychological empowerment. In the realm of blogging this may suggest that gaining control over one’s voice can translate and
extend into attaining higher control over other areas in one’s life. Thus, while both agency and psychological empowerment as defined here incorporate a sense of control, the former pertains strictly to control over one’s voice, while the latter refers to a broader sense of control over various life domains.

Research Questions and Hypotheses

As evident from the preceding discussion, the central thesis of the present dissertation is that blogging can be empowering to those undertaking it. The main assumption behind this thesis is that, by incorporating technological functions of both interpersonal and mass communication media, blogs serve to empower their authors by placing them in a position to make this medium work to their advantage. Despite encouraging content different in nature, the two identified blog formats, filter blogs and personal journals, share exactly the same technological characteristics and structural functions. Seen as a consequence of the constant blogging activity enabled by their multi-faceted technological features, rather than a function of their content, psychological empowerment is expected therefore to emerge as a significant outcome from both blog formats.

H1: Both personal journaling and filter blogging are significant positive predictors of psychological empowerment.

In light of their rich technological capabilities, blogs have also been adopted for various personal and social purposes (see Nardi et al., 2004, Sundar et al., 2006). To the extent that these goals are realized via blogging, one most likely derives a strong sense of empowerment. However, due to the lack of research to date suggesting the degree to which the various motivations for
blogging are realized by undertaking this activity, as well as to the absence of a clear typology of such motivations, a first exploratory research question asks:

**RQ1:** What is the relationship between motivations for blogging and psychological empowerment?

Going with the previously mentioned conceptualization of blogging as an empowering process, it further becomes plausible that irrespective of one’s motivations for blogging the more one engages in it, the more empowered one becomes:

**H2:** There will be a positive relationship between one’s blogging experience and psychological empowerment.

Finally, as implied in the previous discussions, SOC and SOA are expected to mediate at least some of the relationships type of blogging, motivations for blogging, blogging experience, and psychological empowerment. Consequently, a final research question asks:

**RQ2:** For blog authors, what is the relationship between motivations for blogging, type of blogging and blogging experience, AND the role played by the relative levels of one’s SOC and SOA in enhancing the level of psychological empowerment?

The next chapter details the method of a survey study employed to test these hypotheses and answer the two research questions. It also presents the results, discussing them in light of their theoretical implications and possible design limitations.
Survey Study

A study was conducted in order to assess female bloggers’ perceptions of their own psychological empowerment as a function of their type of blogging, motivations for blogging, as well as their experience with blogging (both as authors and readers). Considering the exploratory nature of the study and the goal to gain specific information about a group (i.e., women) engaging in a very particular activity (i.e., blogging), a survey presented the best methodological option.

Sampling and Participants

To this end, an online survey investigating “women bloggers’ perceived motivations for and effects of their blogging” was conducted with female bloggers sampled from two different publicly available directories listing blogs authored by women only (http://www.blackwomenbloggers.com and http://blogher.org/bloghers-blogrolls). Request for participation was made either via e-mail, when e-mail information was displayed in the author’s profile, or via a comment posted on the most recently dated entry, when the author’s e-mail was not available. Irrespective of the venue by which the request for participation reached the blog author, the script was the same. In order to maximize the response rate, before starting the sampling, it was decided that requests for participation would be sent out to blog authors who had updated their blog (i.e., had written at least one entry) in the last six months previous to the study. Blogs which did not have at least one entry in the previous six months were considered “inactive” and were discarded from our population.
Participation requests were sent out to 660 bloggers, which yielded a final sample of 340 respondents and a response rate of 51.5%.

A total of 49.4% of these described themselves as Caucasian, the rest being women of color (i.e., 29.4% African American, 4.1% Asian American, 2.1% Hispanic, .9% Native American, .3% Pacific Islander and 12.4% Other).

Respondents’ age ranged from 17 to 61, with a mean age of 33.4 (SD = 8.34). The level of education was relatively high, with 45.6% having completed college, 30.9% graduate school, 15.6% post-graduate school and 7.9% high school only.

Measures

As already indicated, the primary measures of interest in this survey were the type of blogging, motivations for blogging, blogging experience, and psychological empowerment. A pretest was first conducted on a random sample of forty blogs (N = 40), mainly to derive motivations for blogging from female bloggers themselves. The other measures of interest were then added, in an attempt to get a preliminary sense of their factor structure and reliability. Even though the pretest sample was rather small and therefore any patterns emerging from it may be fairly unstable, this preliminary step still yielded useful recommendations for the final set of motivations, as well as for one of the dependent measures, sense of community.

Independent Measures

Type of blogging. Seven items were constructed in order to assess the kind of writing respondents most typically undertook in their blogs. These measures were derived based on the distinctions made in the literature between filter blogs and personal journals and the most common features of these two types of blogs.
(Blood, 2000; Herring et al., 2004). Such common features include writing about personal issues and experiences, and incorporating links to outside sources only when relevant to bloggers’ personal stories – for personal journals, and writing about social issues, politics, science, as well as incorporating links to outside sources customarily – for filter blogs. Respondents were asked to indicate the degree to which each of the seven statements presented to them characterized their blogging activity (see questions 1-7 from Part One of Appendix B on p. 132), and all questions were assessed on a 1-9 scale (“1” representing “Never,” “5” representing “Sometimes,” and “9” representing “Always”).

Motivations for blogging. Motivations for blogging were assessed by asking respondents to rate the extent to which thirty-eight distinct motivations reflected their reasons for having started to blog as well as for continuing to blog to the present day. Informed by past research on blog motivations (Nardi et al., 2004; Sundar et al., 2006; Trammel & Keshelashvili, 2005) and the Uses and Gratifications approach (Rubin, 1984), these thirty-eight items were intended to tackle both instrumental and ritualized motivations for use of blogs. Some of these items were directly generated by bloggers themselves via an open-ended question included in the pretest survey. Instrumental motivations for use included the following components: self-exploration (E.g., I blog to explore hidden aspects of my identity), community building (E.g., I blog because I want to get to know people with similar values), coping (E.g., I blog to vent about my own problems), asserting one’s voice (E.g., I blog because I want to express my own voice) and bringing about change (E.g., I blog because I want to make this a better world). Ritualized motivations for use included a few items eliciting the extent
to which respondents blogged as a means of escaping boredom and seeking entertainment (e.g., I blog to kill my time). All items were anchored from “1” representing “Not At All” to “9” representing “A Lot” (see items 1-38 from Part 2 of Appendix B on p. 134).

**Blogging experience.** Eight questions were formulated to tap into four distinct aspects of blogging experience: *history* (i.e., how long one has been blogging for), *blog traffic* (i.e., number of comments and site visits received), *activity as blogger* (e.g., frequency of updating, blogroll size), and *activity as reader* (e.g., frequency of browsing or commenting on other blogs) (see questions 9-18 from Part One of Appendix B on p. 132).

**Dependent Measures**

*Psychological empowerment.* As Zimmermann (1995) pointed out, measuring psychological empowerment may be particularly difficult given that it varies greatly across different individuals, is highly dependent on the setting/context, and fluctuates considerably in time. As a result, “[t]he development of a universal and global measure of empowerment is not an appropriate goal because it may not mean the same thing for every person, organization or community everywhere” (p. 587). Thus, given that the present research is aimed at assessing psychological empowerment derived from a very specific activity, i.e., blogging, it became important to develop measures that are particularly pertinent to this context and able to capture blogs’ full potential for empowerment.

Consistent with the conceptualization of psychological empowerment adopted in this dissertation, twenty-two empowerment measures were designed
to tap into aspects of *perceived mastery and control* (E.g., Blogging enables me to control some aspects of my life), *connectedness* (E.g., I feel that I connect very well with my readers), and *perceived ability to effect change* (E.g., Blogging gives me the right skills to bring about social change) (see items 1-3, 5-12, and 16-26 from Part Three of Appendix B, p. 138).

All items pertaining to empowerment asked respondents to indicate the degree to which each of the statements characterized the perceived effects or outcomes of their blogging, and were anchored on a 1-9 scale ranging from “Not At All” to “A Lot.”

**Intervening Variables**

*Sense of agency (SOA).* This first potential intervening variable was assessed via three questions aimed at tapping into the three core concepts of agentic individuals (Eagly, 1987), in this case in relation to their own voice: “Blogging makes me feel I have control over my own voice” (*competence*), “Blogging enables me to assert myself” (*assertiveness*), and “Blogging makes me feel I have a distinct voice” (*confidence*).

*Sense of community (SOC).* Sense of community was operationalized in the form of a 21-item scale adapted from the original “Sense of Community Index” scale (SCI) (McMillan & Chavis, 1986) and inspired by the more recent “Sense of Virtual Community Index” (SVCI), which is SCI adjusted to the community setting of an online listserv (Blanchard, 2004). Items were phrased in such a way so as to evoke blogging as a source of one’s sense of community (E.g., I have raised questions in this blog that have been answered by readers, I have gotten support from those following my blog, etc.). One additional item was included
besides the items adapted from SCI to tap into another later added theoretical component of SOC (McMillan, 1996), i.e., spirit (E.g., Blogging makes me feel part of a larger community) (see items 4 and 27-48 from Part Three of Appendix B, p. 138).

Demographic measures such as gender, age, ethnicity and level of education were collected as well.

*Index Construction and Preparation for Data Analysis*

A first exploratory factor analysis was performed on the seven items assessing type of blogging, yielding two factors with eigenvalues greater than one. Together, these two factors accounted for 85.69% of the variance explained. An item was considered to load on a given factor if it had a .6 or higher loading on that factor, but .4 or lower on the rest of the factors (McCroskey & Young, 1979). After applying the .60-.40 rule, two items loaded under the first factor labeled “personal journaling” (I blog about personal issues, and I blog about personal experiences). These items were highly correlated with each other, indicating good internal consistency for the index combining them, Pearson’s $r = .80$, $p < .001$. Two other items loaded reliably under the second factor labeled “filter blogging”, Pearson’s $r = .63$, $p < .001$ (I blog about social issues, and I blog about political issues). The remaining three items cross-loaded and were dropped from further analyses.

A second factor analysis was conducted on the thirty-eight items pertaining to motivations for blogging, which yielded six factors with eigenvalues greater than one. Upon a closer scrutiny, with many of the items cross-loading on several factors and with the scree plot suggesting a three-factor
solution, a subsequent factor analysis was performed asking for three factors only. All three factors had eigenvalues greater than one, and together accounted for 61.90% of the total variance explained (see Table 1). Thirteen out of the thirty-eight factors cross-loaded and were dropped from further analyses. Ten out of the twenty-five remaining items loaded under the first factor labeled “motivations to bring about change.” This item exhibited a high degree of internal consistency (Cronbach’s $\alpha = .92$). Seven items loaded reliably under the second factor labeled “motivations to connect” (Cronbach’s $\alpha = .92$). Finally, eight items loaded under the last factor, “motivations to explore oneself” (Cronbach’s $\alpha = .90$). No “ritualized” blog use factor emerged from this analysis.

A third and final factor analysis was conducted upon the twenty-two items relating to psychological empowerment, which yielded three factors accounting for 66.19% percent of the total variance explained (see Table 2). Ten items loaded under the first empowerment factor labeled “autonomy & control,” exhibiting a high degree of internal consistency (Cronbach’s $\alpha = .92$). The second factor, consisting of five items, was labeled “sense of influence” and also showed high internal consistency (Cronbach’s $\alpha = .90$). Finally, the third factor was named “interconnectedness” and emerged reliably out of three items (Cronbach’s $\alpha = .76$). The remaining four items cross-loaded on the emerging factors and were dropped from further analyses.

For reasons of parsimony, the SOC and SOA scales were not factor-analyzed. Instead, they were checked for internal consistency, both scales yielding high reliability coefficients (Cronbach’s $\alpha = .84$ & .87 respectively).
Results

The emerging independent variables from the above mentioned analyses are as follows: filter blogging and personal journaling for type of blogging, motivations to bring about change, motivations to connect and motivations to explore oneself for motivations for blogging. The third independent variable, blogging experience, was not factor-analyzed, the multiple items measuring it being assessed on different scales. The emerging dependent variables for psychological empowerment were sense of autonomy & control, sense of influence and interconnectedness.

In an attempt to address all hypotheses and research questions, the data analytic strategy adopted here follows Baron & Kenny’s (1986) steps for testing mediation. As such, a series of multiple regression models were initially performed by independently regressing each psychological empowerment component on the factors composing a given independent variable. In the second step, the two potential mediators, i.e., SOC and SOA were separately regressed on only those predictors that were significant in influencing the psychological empowerment components in the first place. The third step consisted of establishing that the two mediators significantly affected the dependent variable, that is, the three empowerment factors were independently regressed on SOC and SOA. Finally, the same initial significant relationships between the various independent variables and each of the empowerment factors were tested again while controlling for SOC and SOA.

Furthermore, given that the present sample yielded an equal number of white women (N = 167) and women of color (N = 166), all analyses were
conducted in an attempt to identify possible differences between these two groups in their levels of psychological empowerment as a result of blogging. More specifically, ethnicity and the possible interaction terms were included together in the initial regression models and carried throughout the rest of the mediation steps if initially significant.

**Type of Blogging**

First, three distinct regression analyses were conducted with personal journaling, filter blogging, ethnicity and the two possible interaction terms as predictors and each of the empowerment factors as dependent outcomes, in turn. The first regression was significant overall, $F(5, 326) = 7.05, p < .001$, adjusted $R^2 = .08$, with only personal journaling as significant predictor of autonomy & control. After the gradual removal of non-significant predictors, the final model, $F(1, 335) = 30.62, p < .001$, adjusted $R^2 = .08$, still included personal journaling as the only significant predictor. The second initial overall regression model was also significant, $F(5, 326) = 33.10, p < .001$, adjusted $R^2 = .34$, and so was the second reduced one, $F(2, 334) = 85.31, p < .001$, adjusted $R^2 = .34$, including both personal journaling and filter blogging as significant predictors of sense of influence. Lastly, the third regression performed on the interconnectedness outcome proved to be non-significant overall, $F(5, 326) = 1.15, p > .05$, adjusted $R^2 = .02$ (see Table 3).

In the second step, those variables that were shown to be significant predictors of at least one of the empowerment factors were examined in relation to SOC first, and SOA next. The first regression singled out personal journaling as the only significant predictor of SOC, $F(2, 334) = 6.16, p < .01$, adjusted $R^2 = .04,$
whereas the second yielded filter blogging as the sole significant predictor of SOA, $F(2, 334) = 2.76$, $p = .06$, adjusted $R^2 = .02$ (see Table 4).

The next step consisted of a series of multiple regressions with SOC and SOA as predictors and each of the empowerment factors as dependent outcomes entered separately. The first analysis revealed an overall significant model, $F(2, 335) = 123.37$, $p < .001$, adjusted $R^2 = .24$, with both SOC and SOA as significant predictors of autonomy & control. The second regression was also significant, $F(2, 335) = 18.92$, $p < .001$, adjusted $R^2 = .10$, with both SOC and SOA significantly predicting sense of influence. Finally, the third regression model and both SOC and SOA significantly predicted interconnectedness, $F(2, 335) = 122.54$, $p < .001$, adjusted $R^2 = .42$ (see Table 5).

Lastly, SOC and SOA were investigated as potential mediators between type of blogging and empowerment. The first empowerment outcome, autonomy & control, was predicted only by personal journaling, which was also shown to have a significant effect on SOC. Consequently, a first regression model included personal journaling as a predictor and SOC as a covariate in assessing autonomy & control. The overall model was significant, $F(2, 334) = 35.53$, $p < .001$, adjusted $R^2 = .17$, personal journaling retaining its significance as a predictor. A follow-up Sobel test indicated that SOC did mediate the relationship between personal journaling and autonomy & control (Sobel test statistic = 2.65, $p < .01$). The second empowerment outcome, sense of influence was initially predicted by both personal journaling and filter blogging. Given that only personal journaling further predicted SOC and only filter blogging further predicted SOA, two distinct regression models were built to examine
these different potential mediation routes. The first consisted of personal journaling as a predictor and SOC as a covariate, which proved significant overall, $F(2, 334) = 42.85, p < .001$, adjusted $R^2 = .20$, with personal journaling still a significant predictor. A follow-up Sobel test corroborated the conclusion that SOC was not a significant mediator of the negative relationship between personal journaling and sense of influence (Sobel test statistic = 1.84, $p > .05$). Finally, a similar regression was conducted with filter blogging as predictor and SOA as mediator, which was significant overall, $F(2, 334) = 90.15, p < .001$, adjusted $R^2 = .35$. Filter blogging retained its significance, but a follow-up Sobel test showed that SOA did mediate the relationship between filter blogging and sense of influence (Sobel test statistic = 2.11, $p < .05$). These findings provide partial support for H1, revealing that personal journaling and filter blogging predicted two of the three psychological empowerment components.

Figure 1. Diagram presenting the summary of findings for the relationship between type of blogging and psychological empowerment

![Diagram](image)

Motivations

In order to determine the role of various motivations to blog in predicting empowerment (as addressed in RQ1), but also to examine whether women bloggers’ ethnicity makes a difference, three sets of multiple regression analyses were conducted with the three motivations, ethnicity and the three possible
motivations X ethnicity interaction terms as predictors, and each of the three empowerment components as dependent outcomes, in turn.

First, the seven predictors were included in a multiple regression aimed at predicting autonomy & control. The overall regression model was shown to be significant, $F(7, 325) = 41.22, p < .001$, adjusted $R^2 = .47$, with all three motivations to blog being significant as well. Upon removing the four non-significant predictors (one by one, in order of their significance, i.e. the less significant first), the final reduced model, $F(7, 325) = 94.99, p < .001$, adjusted $R^2 = .46$, included two significant predictors (motivations to bring change and motivations to explore oneself) and a marginally significant one (motivations to connect). Table 6 presents the statistics associated with these analyses.

A second multiple regression was conducted with the same initial predictors and sense of influence as the dependent outcome. The overall regression model was significant, $F(7, 325) = 128.12, p < .001$, adjusted $R^2 = .73$. Motivation to bring change was significant, while motivations to explore oneself was marginally significant. After removing the non-significant predictors, the final regression model, $F(2, 335) = 468.23, p < .001$, adjusted $R^2 = .74$, included motivations to bring change and motivations to explore oneself as significant predictors (see Table 6).

Finally, a third multiple regression was conducted with the same seven predictors and interconnectedness as the dependent measure. The overall model was significant, $F(7, 325) = 20.49, p < .001$, adjusted $R^2 = .31$. This analysis yielded three significant predictors: motivations to connect, ethnicity and the interaction term between these two predictors. The reduced model, after removing non-
significant predictors, was also significant, $F(3, 329) = 47.54, p < .001$, adjusted $R^2 = .30$, and included the same three significant predictors (see Table 6). Figure 2 presents a graphical representation of the interaction effect.

![Figure 2. Motivations to connect X ethnicity interaction](image)

Further analyses were next conducted to examine whether SOC and/or SOA mediated the significant relationships between motivations for blogging and the various empowerment factors. Consequently, two separate analyses were first conducted by regressing the three motivations for blogging, ethnicity and the one significant interaction term from the previous analyses (i.e., ethnicity X motivations to connect) first on SOC, and then on SOA. The first multiple regression model was significant overall, $F(5, 327) = 23.94, p < .001$, adjusted $R^2 = .26$, revealing that motivations to connect was a significant predictor of SOC, whereas motivations to bring change and explore oneself were only marginally significant. Upon removing non-significant predictors, one by one, the final reduced model, $F(3, 334) = 39.82, p < .001$, adjusted $R^2 = .26$, revealed motivations to connect and to explore oneself as the only significant predictors of SOC. Next, the same five predictors were regressed on SOA, which resulted in a significant
overall model, \( F(5, 327) = 24.01, p < .001 \), adjusted \( R^2 = .27 \). Three significant predictors were unveiled in this model – motivations to bring change, motivations to explore oneself, and ethnicity. Motivations to connect had only a marginal influence on SOA. The final model, \( F(3, 329) = 38.72, p < .001 \), adjusted \( R^2 = .26 \), consisted of the same three significant predictors, motivations to connect losing significance altogether upon removing the ethnicity X motivations to connect interaction term (see Table 7).

Since it was already shown that SOC and SOA are significant predictors of all three empowerment factors in the previous section, the third step was not repeated (see Table 5).

The last mediation step involved a series of multiple regressions with the initially significant motivations on the empowerment factors, while controlling for SOC and/or SOA. The first empowerment factor assessed was autonomy & control. Its initial predictors were motivations to bring change, to connect and to explore oneself. Given that not all three predictors also had a significant effect on both SOC (predicted only by motivations to connect and to explore oneself) and SOA (predicted only by motivations to bring change and to explore oneself), two separate models were designed to test possible mediation effects. The first included motivations to connect and explore oneself as predictors, autonomy & control as dependent outcome, and SOC as mediator. The overall regression model was shown to be significant, \( F(3, 334) = 100.32, p < .001 \), adjusted \( R^2 = .47 \). Motivations to connect ceased to be a significant predictor of autonomy & control when SOC was included as a predictor, while motivations to explore oneself retained its significance. A follow-up Sobel test confirmed that SOC does indeed
mediate the relationship between the motivation to explore oneself and the empowerment factor related to autonomy & control (Sobel test statistic = 3.06, $p < .001$). The second model investigating autonomy & control included motivations to bring change and motivations to explore as predictors and SOA as a covariate/mediator. The model was significant, $F(3, 334) = 87.19$, $p < .001$, adjusted $R^2 = .43$, both motivations to bring change and to explore oneself, retaining their significance as well. A follow-up Sobel test indicated that SOA nonetheless significantly mediated the relationship between motivations to bring change and autonomy & control (Sobel test statistic = 7.08, $p < .001$), as well as the one between motivations to explore oneself and autonomy & control (Sobel test statistic = 6.09, $p < .001$).

The second empowerment factor, sense of influence, was predicted in the first place by motivations to bring change and motivations to explore oneself. These two predictors did not also have a significant effect on both SOC (predicted by motivations to explore oneself only) and SOA (predicted by both motivations to bring change and to explore oneself) and, as a result two distinct regression models were set up. The first included motivations to bring change as a predictor and SOA as a covariate, which proved significant overall, $F(2, 335) = 457.20$, $p < .001$, adjusted $R^2 = .73$. Motivations to bring change retained its significance, a follow-up Sobel test indicating, however, that the indirect effect of motivations to bring change on sense of influence via SOC is significantly different from zero (Sobel test statistic = 4.18, $p < .001$). The second regression model included motivations to explore oneself as a predictor and SOC and SOA as covariates. This model was also significant, $F(3, 334) = 25.38$, $p < .001$, adjusted
\[ R^2 = .18, \] motivations to explore oneself retaining its significance as a predictor as well. Two follow-up Sobel tests indicated that, while SOC indeed did not significantly mediate the relationship between motivations to explore oneself and sense of influence (Sobel test statistic = 1.46, \( p > .05 \)), SOA did (Sobel test statistic = 3.95, \( p < .001 \)).

The last empowerment factor was initially predicted by motivations to connect, ethnicity and the motivations to connect X ethnicity interaction. Of these, only motivations to connect significantly predicted SOC, while only ethnicity predicted SOA. As a result, a first regression model included motivations to connect as a predictor and SOC as a covariate. This proved significant, \( F(2, 335) = 145.31, p < .001 \), adjusted \( R^2 = .46 \), with motivations to connect as still a significant predictor. A follow-up Sobel test confirmed that SOC significantly mediates the relationship between motivations to connect and interconnectedness as an empowered outcome (Sobel test statistic = 2.13, \( p < .05 \)).

The second regression model investigating interconnectedness included ethnicity as a predictor and SOA as a covariate. This model was also significant, \( F(2, 335) = 63.22, p < .001 \), adjusted \( R^2 = .10 \), ethnicity losing its significance as a predictor. A final Sobel test did reveal that the relationship between ethnicity and interconnectedness was significantly mediated by SOA (Sobel test statistic = 2.13, \( p < .05 \)).

**Blogging Experience**

**History.** First, the one item indicating history with blogging, i.e., number of months one had blogged, ethnicity and their interaction terms were included
as predictors in three subsequent multiple regressions, in relation to each of the empowerment components. These analyses revealed that one’s history with blogging did not predict autonomy & control, $F(3, 327) = .931, p > .05$, adjusted $R^2 = .01$, sense of influence, $F(3, 327) = 1.85, p > .05$, adjusted $R^2 = .02$, or interconnectedness, $F(3, 327) = .62, p > .05$, adjusted $R^2 = .01$. 

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Figure 3. Diagram presenting the summary of findings for the relationship between motivations for blogging and psychological empowerment.
Traffic. A second set of regressions examined the influence of traffic (number of comments and visitors) on empowerment. The overall model with the two traffic predictors, ethnicity, and the two interaction terms did not prove significant in predicting autonomy & control, $F(5, 315) = .84, p > .05$, adjusted $R^2 = .01$. The two other models, one predicting a sense of influence, $F(5, 315) = 4.39, p < .001$, adjusted $R^2 = .07$, and the other predicting interconnectedness, $F(5, 317) = 3.99, p < .01$, adjusted $R^2 = .06$, were both significant. These models further revealed that sense of influence was predicted by number of visits, whereas interconnectedness was predicted by number of comments (see Table 8).

Next, number of visits and number of comments were entered in two separate regression models predicting SOC and SOA respectively. The one predicting SOA was not significant, $F(2, 323) = .39, p > .05$, adjusted $R^2 = .002$, but the other, predicting SOC, was, $F(2, 323) = 7.60, p < .001$, adjusted $R^2 = .01$. This model further revealed that both number of comments and number of visits served as significant predictors of bloggers’ perceived sense of community (see Table 9).

As both SOC and SOA had already been shown to be significant predictors of all empowerment outcomes (see Table 5), the next two analyses involved two separate simple regressions, as follows. First, SOC was included as a covariate in a model examining the relationship between number of visitors and sense of influence, which proved significant, $F(2, 324) = 11.91, p < .01$, adjusted $R^2 = .07$. The effect of number of visitors on sense of influence was still significant, indicating that SOC does not mediate this relationship. A follow-up Sobel test confirmed this (Sobel test statistic = 1.49, $p > .05$). The second
regression investigated the role of SOC in mediating the relationship between number of comments and interconnectedness. The overall model was significant, $F(2, 331) = 113.63, p < .05$, adjusted $R^2 = .45$, but so was the influence of number of comments on interconnectedness, while controlling for SOC. A Sobel test was conducted next, to determine whether the indirect effect of number of comments on interconnectedness through SOC was significantly different from zero. This test showed that SOC did in fact mediate the relationship between comments and interconnectedness (Sobel test statistic = 2.64, $p < .01$).

*Activity as Blogger.* The next three analyses separately regressed each of the empowerment factors on size of blogroll, frequency of updating (as indicators of activity as blogger), ethnicity and the two possible interactions. The first model was non-significant overall, $F(5, 317) = 1.19, p > .5$, adjusted $R^2 = .02$ (for autonomy & control), unlike the next two, $F(5, 317) = 3.94, p < .01$, adjusted $R^2 = .08$ (for sense of influence), and $F(5, 317) = 5.75, p < .001$, adjusted $R^2 = .08$ (for interconnectedness). It was further revealed that sense of influence was predicted by ethnicity, size of blogroll and frequency of updating, while interconnectedness was predicted by blogroll size (see Table 8).

Next, these significant predictors were regressed upon SOC first and SOA next. The first model proved significant overall, $F(4, 318) = 7.40, p < .001$, adjusted $R^2 = .07$, the final reduced model revealing blogroll size as the only significant predictor of SOC, $F(1, 326) = 9.72, p < .01$, adjusted $R^2 = .03$. The second model was also significant, $F(4, 318) = 4.23, p < .01$, adjusted $R^2 = .04$, the
final reduced model revealing only blogroll size and ethnicity as significant predictors of SOA, $F(2, 320) = 6.89, p < .001$, adjusted $R^2 = .04$ (see Table 9).

Skipping the third step, the last one examined the role of SOC and SOA as mediators between activity as blogger variables and sense of influence and interconnectedness. Sense of influence was initially predicted by ethnicity, blogroll size and frequency of updating. Of these, blogroll had a significant effect of both SOC and SOA, while ethnicity had a significant effect on SOA only. As such, two distinct models were created, the first one investigating the relationship between blogroll size and sense of influence as mediated by SOC. The regression was significant overall, $F(2, 325) = 8.00, p < .001$, adjusted $R^2 = .04$, but blogroll size was still a significant predictor. A Sobel test indicated that indeed SOC did not serve to mediate this relationship (Sobel test statistic = 1.79, $p > .05$). A second regression included both blogroll size and ethnicity as predictors, while controlling for SOA in predicting sense of influence. The model was significant overall, $F(3, 319) = 13.01, p < .001$, adjusted $R^2 = .10$, with ethnicity losing significance, while blogroll size retaining it. A Sobel test revealed that SOA did in fact mediate the relationship between blogroll size and sense of influence (Sobel test statistic = 2.17, $p < .05$). Lastly, interconnectedness was initially predicted by blogroll size, which also predicted SOC and SOA. As a result, two distinct models were run. The first, including blogroll size as a predictor and SOC as a mediator proved significant overall, $F(2, 325) = 109.82, p < .001$, adjusted $R^2 = .40$, blogroll size ceasing to be a significant predictor. The second model, including blogroll size as predictor and SOA as mediator was also significant, $F(2, 325) = 24.59, p < .001$, adjusted $R^2 = .13$, with blogroll size
retaining significance. A Sobel test was next performed, which showed that SOA does in fact mediate the relationship between blogroll size and interconnectedness (Sobel test statistic = 2.31, \( p < .05 \)).

*Activity as Reader.* Finally, when the activity as reader components were regressed on autonomy and control, frequency of browsing and posting comments on others blogs were both revealed as significant predictors, \( F(7, 323) = 1.97, p = .05 \), adjusted \( R^2 = .04 \) (see Table 8). The next to models, one predicting sense of influence, \( F(7, 323) = 1.82, p > .05 \), adjusted \( R^2 = .04 \), the other – interconnectedness, \( F(7, 323) = 1.22, p > .05 \), adjusted \( R^2 = .03 \), were both non-significant. The two significant predictors (i.e., frequency of browsing and posting comments) were next regressed on SOC and SOA, respectively, and they were both shown to be non-significant predictors of SOC, \( F(2, 334) = .48, p > .001 \), adjusted \( R^2 = -.01 \), as well as SOA, \( F(2, 334) = 2.98, p = .05 \), adjusted \( R^2 = .02 \) (see Table 9).

Altogether, these findings lend support for H2, proposing significant relationships between blogging experience and psychological empowerment.

In sum, results of the present survey highlight psychological empowerment as a prominent outcome of blogging. All three predictors, that is, type of blogging, motivations for blogging and blogging experience were shown to significantly influence relevant psychological empowerment components. More specifically, the sense of autonomy & control was predicted by the degree of personal journaling, motivations to bring change and motivations to explore oneself, as well as by the frequency of browsing and posting comments on other blogs. The sense of influence was predicted by filter blogging, motivations to
bring about change and explore oneself, as well as number of visits received, blogroll size, frequency of updating and ethnicity. Finally, interconnectedness was predicted by motivations to connect, ethnicity and their interaction, as well as by the frequency of posting comments and blogroll size. Furthermore, most of these relationships were mediated by either SOC or SOA, or both, highlighting important theoretical mechanisms serving to clarify the empowering potential of blogging, that will be discussed in what follows.

Figure 4. Diagram presenting the summary of findings for the relationship between blogging experience and psychological empowerment.
Discussion

As emerging from the preceding summary, findings from the present survey provide solid evidence for the broad thesis of the present dissertation proposing blogs’ empowering potential for members of marginalized groups, represented here by women of various ethnic backgrounds.

To start with, one important finding pertains to the revealed relationship between type of blogging and psychological empowerment. More specifically, personal journaling had a significant influence on the sense of autonomy & control component through SOC, and filter blogging was shown to be a significant predictor of sense of influence, through SOA. Conversely, the data also showed that the more one indulges in personal journaling, the weaker their sense of influence. While consistent with the first proposed hypothesis that type of blogging is positively associated with psychological empowerment, these findings point to interesting theoretical ramifications. Particularly, they seem to point to an interaction between structural and content-related features of blogs, whereby blogs with exactly the same structural features but different content-orientation elicit psychological empowerment via two different routes. When focusing on content centered around personal issues and internal workings, bloggers derive a strong sense of autonomy & control, that seems to come about via community validation. On the other hand, the more one pontificates about external events (e.g. politics), the more one feels in control over one’s voice, which in turn enhances one’s sense of influence. It is clear therefore, that although filter blogs and personal journals possess identical technological
features, the type of content one writes “moderates” the influence that these
capabilities have on one’s psychological empowerment.

One other important set of findings pertains to the link between the
various motivations for blogging and the distinct empowerment components. It
was shown in this study that certain motivations bring about very specific
empowered outcomes (e.g., motivations to connect bring about
interconnectedness, motivations to bring change bring about a stronger sense of
influence). While not all motivations for blogging indiscriminately elicited all
empowerment components, the high degree of conceptual agreement between
specific motivations to blog and the particular empowered outcomes they
predicted point to the fact that one’s motivations for blogging are fully realized
by undertaking the blogging activity. For example, women who undertake
blogging to bring about change derive both a strong sense of autonomy and a
strong sense of influence, by way of gaining control over their voice. They do
not, however, feel more interconnected. This is most likely because women who
are motivated to bring about change appropriate this space primarily in order to
fully develop and assert their voice. The fact that they were shown to have a
stronger sense of influence as a result is good enough of an indication that their
initial motivation for blogging was paid off. Thus, these findings offer strong
evidence that blogging offers users the ability to steer communication acts in
accordance with their personal needs as motivations. The women bloggers
investigated in this survey appear therefore to be the ones who are in the driver’s
seat, making this medium work for them. This conclusion is consistent with the
previous set of findings, that is, one reason that blogs appear to be particularly
malleable to users’ goals and intentions may be due to their content-related features. Another point worth noting in discussing the motivations – empowerment link pertains to their mediated aspect. That is, motivations for blogging were shown to bring about psychological empowerment through either SOC (motivations to connect – interconnectedness), or SOA (motivations to bring about change – autonomy & control and sense of influence), or both (motivations to explore oneself – SOC – autonomy & control, and motivations to explore oneself – SOA – sense of influence).

Finally, blogging experience revealed interesting findings itself. In terms of bloggers’ activity (both as a blogger and as a reader), it was shown that frequency of browsing other blogs served to positively influence one’s sense of autonomy & control; blogroll size and frequency of updating one’s blog enhanced perceived sense of influence; finally, blogroll size and frequency of posting comments on other blogs enhanced one’s sense of interconnectedness via a strong sense of community. All these suggest that as long as one invests the effort to become more empowered, one will. This pattern is highly consistent with theorizing on psychological empowerment suggesting that empowerment is relatively dependent on participatory elements (Zimmerman, 1995). Further, once again, SOC and SOA were shown to be immediate effects of blogging-related variables and precursors of psychological empowerment.

One surprising finding of the present study pertains to the lack of influence of history with blogging (i.e., how long one had been blogging for) on either of the empowerment factors. In light of the other previously discussed findings, it may be possible to conclude that it is not the sheer amount of
blogging that necessarily leads to empowered outcomes, but the degree the amount of effort and activity invested in it. That is, it may very well be possible that someone who has been blogging for a relatively short period of time but has been more active as both a blogger (e.g., updating, building an extended blogroll) and a reader (e.g., browsing other blogs and posting comments), and exhibiting strong and specific motivations for blogging, might feel more psychologically empowered than someone who has blogged for a longer period of time but had been less “active”. This conclusion is further buttressed by the revealed links between motivations and empowerment, suggesting that as long as one has clear motivations for blogging psychological empowerment ensues. Thus, longevity without determination does not work.

Interestingly enough, there were not many differences in empowered outcomes between women of color and white women. A few differences are noteworthy, nonetheless. First, the positive relationship between ethnicity and sense of agency suggests that, overall, women of color derive a stronger sense of agency from blogging than white women. This may be so because as traditionally more marginalized than white women, women of color may particularly welcome the ability to express their own voice. As a result, their perception of control over their own voice becomes more accentuated than for white women, who have been given more opportunities to assert their voice in more areas of their lives and for a longer time. Further, the positive relationship between ethnicity and interconnectedness suggests that women of color overall feel more interconnected as a result of blogging than white women. This has to be interpreted in light of a significant ethnicity X motivations to connect
interaction, indicating that while for both white women and women of color the stronger the motivations to connect the more interconnected they feel as a result of blogging, this effect becomes significantly more pronounced for white women as motivations to connect get stronger. This particular finding may suggest that, while women of color may welcome the ability to control their voice more than white women through blogging, they may also be less agentic than white women in the first place because of the same reasons presented above. That is, it may well be possible that white women were more confident perhaps in their ability to make the blogging medium work for them driven directly by their motivations, than women of color. Besides the difference in the ability to express their voice historically, this finding may also be explained perhaps by a better familiarity with the technology on white women’s part.

The lack of other significant differences across women of different ethnicities pointed to the possibility of very similar characteristics among them otherwise. A chi-square analysis performed to test for this possibility revealed that indeed, women of color and white women were very similar in terms of education level, and presumably socio-economic status, $\chi^2(3) = 1.32, p > .05$, suggesting that at least for women with these characteristics, empowerment takes similar routes and occurs to similar degrees for both women of color and white women.

One other surprising finding of this study pertains to the relatively high correlations between motivations for blogging and specific psychological empowerment factors (see Table 6). As noted earlier in the explication of psychological empowerment, blogging itself may be thought of as the
participatory component of psychological empowerment and, as such, the very activity of blogging denotes a certain level of empowerment present in bloggers to start with. In this sense, the high correlations between motivations and empowerment are not unexpected. The difficulty, however, arises in establishing whether it is blogging that leads to psychological empowerment rather than psychological empowerment to blogging. From a theoretical standpoint it can be argued that the first route is more plausible. While a certain degree of psychological empowerment is necessary to undertake blogging in the first place, the continued activity of blogging is likely to boost one’s sense of psychological empowerment further, by imbuing users with a deeper sense of agency as well as a stronger sense of community. The revealed mediation paths serve to further buttress this rationale.

Limitations

Despite the promising findings uncovered in the present study, it has to be noted that, as is the case with survey research in general, the present study cannot rule out threats to internal validity. More specifically, due to the lack of manipulated independent variables (i.e., causes) survey research is not able to establish causal relationships (Frey, Botan, & Kreps, 2000). The fact that the present survey was able to uncover a series of mediators intervening in the relationship between most independent and dependent variables serves to reduce these threats to some extent. In addressing the issue of causality in cultivation research (overwhelmingly based on surveys), Shrum et al. (2000) suggested that one potential remedy is to focus on psychological process variables that may either mediate or moderate the influence of independent
variables on the dependent outcomes. “That is, if moderators or mediators of a particular relation can be identified that fit within a specified theory, then the pattern of results becomes much more difficult to explain from other causal perspectives.” (Shrum et al., p. 5). The inclusion of mediators in testing for certain relationships does not mean those relationships are now causal. For example, while it was shown that SOC and SOA affect all empowerment outcomes, that does not exclude the possibility that it is empowerment outcomes that affect SOC and SOA, instead of the other way around.

One other potential way to address this problem would be adopting a longitudinal survey design instead of a cross-sectional one. Future research may examine women bloggers’ empowerment by employing a panel study, for example. Panel studies collect measurements from the same individuals across multiple waves (Frey, Botan, & Kreps, 2000), and thus are able to reveal the temporal precedence clause for establishing causality (i.e., X precedes Y in time) and, as a result, more proficient at establishing a higher level of internal validity than are cross-sectional studies. Furthermore, while cross-sectional studies are only able to assess inter-individual variations, longitudinal designs also tap into intra-individual differences. For example, referring to the specifics of the present study, a longitudinal survey such as a panel study would not only reveal differences between white women and women of color in terms of experiencing empowerment as a result of blogging but would also be able to highlight changes and differences within individuals of these groups, e.g., perhaps the threshold to become empowered is different for women of color versus white women and occurs at different points in times for these two groups.
The best approach to tackling the issue of causality in testing mediation dwells in adopting a method that avoids correlational paths in all steps of the mediation model. Moderated mediation provides such a method, that is, transforming the mediator into a manipulated moderator. To illustrate, the two mediators between blogging-related variables and psychological empowerment in the survey study were SOC and SOA. By finding a way to manipulate these, instead of measuring them, we would be able to confidently make causal inferences by factorially crossing them with the other independent variables. For example, if a way was found to manipulate SOC and SOA and factorially cross them with type of blogging, it would then be possible to determine whether empowered outcomes are emerging more strongly as a result of personal vs. filter blogging for those participants assigned to high levels of SOC only, and whether conversely empowered outcomes emerge more strongly as a result of filter vs. personal blogging for those participants assigned to high levels of SOA only. It is these types of concerns that prompted the second study of the present dissertation, a factorial experiment. Going back to the SOC and SOA conceptualizations employed in the previous study, it became reasonable to expect that SOC (i.e., feelings membership, influence, integration and fulfillment of needs, as well as shared emotional connection), is most likely elicited by the number of comments received on one’s blog, while SOA (i.e., control over one’s voice) is perhaps best evoked by the number of hits, or site visits, registered on one’s blog. Number of comments and site visits become thus the two proxy manipulations for SOC and SOA, respectively. The only independent variable included in this experiment from the ones employed in the survey was type of
blogging, recognizing the problematic nature of manipulating one’s motivations for blogging or blogging experience.

In light of the above and in an attempt to replicate the survey findings, a new set of hypotheses is proposed. First, consistent with the reasoning laid above, if comments are indeed cueing a deep sense of community, then an expected main effect should reveal that a high number of comments translates into higher SOC, while having no effect on SOA. Conversely, if site visits are indeed prompting a strong sense of agency, then an expected main effect should reveal that a high number of site visits leads to higher SOA, while having no effect on SOC.

**H1:** A main effect for comments will occur, such that a high number of comments will elicit a stronger sense of SOC.

**H1a:** There will be no main effect for comments on SOA.

**H2:** A main effect for site visits will occur, such that a high number of site visits will elicit a stronger sense of SOA.

**H2a:** There will be no main effect for site visits on SOC.

Based on the discussion of SOC framework’s applicability to blogs and going back to the blog typology presented in the beginning, it becomes conceivable that some of the SOC components are more likely to be experienced in personal blogs – usually centered around a small community of known readers (Nardi et al., 2004), than in filter blogs – aimed at reading large, mass audiences (Harp & Tremayne, 2006). For example, shared emotional connection and integration and fulfillment of needs may occur at a higher rate, or at the very least quicker, in environments where one’s audience is composed mainly of
existing friends and family members, already part of the blogger’s community. Thus, these bloggers are likely to derive instant feelings of reinforcement and support, as well as stronger shared emotional bonds than bloggers who target at more dispersed, mass audiences. Furthermore, while membership never takes a formal shape in blogs (access being open to all, but most likely determined by their topic), informally it may be more defined in personal blogs than in filter blogs. The dialogue created by a tight community of users that know each other will be very different (perhaps more intimate and thus exclusive) than the one created by larger, more heterogeneous audiences, plausibly amenable to dictate who’s in and who’s out. On the other hand, filter blogs, as a vehicle for delivering opinionated and public-spirited pontifications, are potentially more conducive to one’s control over their voice than personal blogs. In light of the above, the next set of hypotheses proposes that:

\[ H3: \textit{A two-way interaction will occur between type of blogging (personal, filter) and comments (low, high), such that a high number of comments will lead to psychological empowerment for participants in the personal condition only.} \]

\[ H4: \textit{A two-way interaction will occur between type of blogging (personal, filter) and site visits (low, high), such that a high number of site visits will elicit psychological empowerment for participants in the filter condition only.} \]

Centered around format-related aspects of journaling, the present experiment further provides a perfect venue to unambiguously test for the much touted similarity between personal blogs and offline diaries, as well as for the possible different routes they might follow in eliciting psychological empowerment. While a vast amount of research has been conducted to
document the positive psychological and physical effects of diary-keeping (Pennebaker, Colder, & Sharp, 1990), a perusal of the literature did not reveal any study directly investigating the empowering potential of such practices, at least not the way in which psychological empowerment was conceptualized here. Furthermore, while invoked in much of the research on blogs (Blood, 2000; Lampa, 2004; Nardi et al., 2004), the similar nature of personal blogs and personal diaries does not seem to have been yet empirically examined.

Based on the previous discussion of blogs, it becomes apparent that unlike personal diaries, personal blogs incorporate a strong interpersonal component via their community-oriented technological features (e.g., comments). While scholars have suggested that as the intersection between the inside and the outside world diaries are a communicative genre for which an audience will turn up sooner or later (Miller & Sheperd, 2004), it becomes reasonable to assume that because of the technological differences between these two mediums the sense of community is more real and pronounced for personal bloggers than diary-keepers. Because of this, at least some aspects of psychological empowerment will also be experienced to a higher degree by personal bloggers than diary-keepers.

*H5: Personal bloggers will show more psychological empowerment than will diary keepers.*

*H6: This relationship will be mediated by SOC.*

Alternatively, the privacy of diary-keeping, however, may well engender a more honest and unfettered personal self-expression, one’s voice becoming potentially more finely honed as a result of diary-keeping than of personal
blogging. Because of this, it becomes reasonable to also expect that diary-keepers will experience greater levels of psychological empowerment than personal bloggers.

\[H7:\text{ Diary-keepers will show more psychological empowerment than will personal bloggers.}\]

\[H8:\text{ This relationship will be mediated by SOA.}\]

The next chapter details the method of a factorial experiment employed to test these hypotheses. It also presents the results, discussing them in light of their theoretical implications and possible design limitations.

**Experiment Study**

A factorial experiment was conducted to determine whether empowerment varies as a function of the type of blog one writes and test the relative role of SOC and SOA in mediating this relationship. In addition, this experiment also examines the relative benefits of blogging vs. diary-writing. Participants \((N = 233)\) were randomly assigned to one of nine experimental conditions – type of blog (personal vs. filter), comments (low vs. high), site visits (low vs. high) plus a diary condition. Subsequent to the experimental treatment, participants were directed to an online questionnaire, with measures pertaining to psychological empowerment and attitudes toward blogging.

**Participants**

Two hundred and thirty-three female participants were recruited from Penn State University \((N = 233)\), from both undergraduate and graduate classes. All efforts were made to recruit both women of color and Caucasian females, however given the non-diverse composition of this campus, the final sample
yielded mostly Caucasian participants (78.6%). The mean age was 20.45 (SD = 2.58), ranging from 18 to 46. Blogging seemed to be a new thing for most participants, with a majority of 60% who had never blogged before, 9.5% who had blogged less than once a year and 13.3% who had done it only a few times per year. All participants were randomly assigned to one of nine experimental conditions, and they all provided their informed consent prior to participating in the study.

Experimental Treatment Conditions

Part 1. Full-Factorial Blogging Experiment. The present study consisted of eight experimental treatment conditions included in a 2 (Type of blog) X 2 (Comments) X 2 (Visits) full-factorial design and one control condition (i.e., diary) added for purposes of comparison with one of the treatment conditions (i.e., personal blog). The three manipulated variables were type of blog, number of comments and number of site visits received per day.

Type of blog. The first manipulation, type of blog, followed the same typology employed to measure the concept in the survey study, according to which most blogs fall within one of two dominant types, i.e., filter vs. personal. As such, about one hundred participants were randomly assigned to the filter blog condition and instructed to write one blog entry of about one hundred words focusing on topics/issues important to them – e.g., politics, social issues, science, feminism, international policy, economy, racism, etc. The rest of the participants were randomly assigned to the personal blog condition and instructed to write one blog entry, also of about one hundred words, but focusing on anything that has to do with their life – e.g., innermost feelings,
personal experiences, personal issues, relationships, health, etc. Once the blogs were created by study participants, the next two manipulations involved the number of comments blog entries received per day, as well as the number of site visits blogs received per day.

**Comments.** For the number of comments manipulations, about a hundred blogs were randomly assigned to the low comment condition, which meant that the entry posted in those blogs received one comment only on each of the two consecutive study days. The remaining hundred blogs were randomly assigned to the high comment condition, that is the blog entry received five comments on the first study day and seven comments on the second study day. For a stronger manipulation, in the study instructions provided to participants, they were told that the typical number of comments received per post in most blogs is around two or three. [The number of comments (low vs. high) was decided upon based on careful scrutiny of the blogs included in the survey study]. Care was taken to ensure that blog entries received very similar comments across the different experimental conditions. This was done by first creating a few comment templates that could be applied across the two types of blog conditions, and across various topics. More specifically, comments were constructed so as to either communicate a blanket statement (E.g. Nice post, thanks for sharing!) or to mirror the author’s thoughts (E.g., Interesting post! Good to see someone blog about...). The blogs in the low-comment condition received one mirroring-back type of comment on the first day and a blanket statement comment on the second day. The high-comment condition received a combination thereof on each of the two study days. The tone was generally mildly positive and supportive.
Further, the fictional commenter names were kept constant across blogs, and were kept gender-neutral. These included Pat, Drew C., Casey, Alex, Cameron, Quinn, Dana, Jamie, Sam J., Robyn, M., and Morgan. The combination of comments and commenters’ names was completely identical for both days across participants, i.e., all participants in the high comment condition received the same five comments the first study day and the same seven comments the second day. Finally, comments were posted on each blog at about the same time.

Site visits. The last of the three manipulations relates to the number of visits blogs received per day. The same two conditions were created, i.e. low vs. high. As a result, a random set of about one hundred blogs received twenty-one site visits (in the low site visits condition), while a different random set of one hundred blogs received fifty site visits (in the high site visits condition) on each of the consecutive study days. For a stronger manipulation, participants were informed in the provided study instructions that the typical number of visits a blog receives per day is around 25 or 30. Given that one comment registered three site visits automatically by the software, care was taken with respect to how many times a site was to be visited in each condition. For example, in the low site visits – high comments condition a blog had to be visited six times the first day and zero times the second day. More specifically, in the high comments condition blogs had to receive five comments the first day and seven comments the second day. However, the five comments translated into fifteen site visits the first day and the seven comments into twenty-one site visits the second day. That means that in the low site visits condition (i.e., twenty-one site visits), the number of visits that needed to be added to reach twenty-one was six the first
day and zero the second day. The blogs were visited by pressing the refresh button on the respective site by the experimenter the necessary number of times in a row.

These three manipulations yielded eight treatment conditions included in a full-factorial experimental study. All participants started the study at the same time, used the same software to create their blog (i.e., WordPress), and were given identical instructions. The only difference in treatment pertained to the manipulated aspects of the study, i.e. what the blog entry should be about and the number of comments and site visits received.

**Part 2. Journaling Experiment.** In addition, a ninth condition was added as a non-blog control in order to assess the relative empowering benefits of journaling about one’s personal life in a public blog as opposed to a private diary. This diary condition was therefore mainly included for its comparison with the personal blog conditions, the independent manipulated variable in this part of the experiment becoming *type of journaling* (diary vs. blog). Similarly to the personal blogging conditions, participants in the diary condition were instructed to write one diary entry of at least one hundred words focusing on anything that has to do with their life – e.g., innermost feelings, personal experiences, personal issues, relationships, health, etc. (for a summary description of the experimental design and measures, see Table 10).

**Dependent Measures**

*Psychological empowerment.* For both the blogging and the journaling studies, the main dependent measures in this study pertained to the same psychological empowerment components as in the survey. The present items
were thus constructed so as to mirror very closely the ones in the survey study. The only difference pertains to the fact that survey respondents had had extensive blogging experience before taking the survey, whereas measurements in both parts of the experiment were collected after only two days of blogging (or one day of journaling). As a result, while all items were designed to reflect as closely as possible the survey measures, they were crafted in such a way so as to elicit participants’ perceived potential for – as opposed to actual – psychological empowerment.

To illustrate, questions in the blogging and journaling experiments read as follows: perceived mastery and control (E.g., Blogging/Writing in a diary can enable me to control some aspects of my life), connectedness (E.g., I expect to connect very well with my readers), and perceived ability to effect change (E.g., Blogging/Writing in a diary can give me the right skills to bring about social change). The empowerment questions asked participants to rate their views on the perceived outcomes and effects of blogging if they were to continue blogging/writing in a diary beyond the experience offered by taking part in the study.

*Attitudes toward blogging.* Given that as already mentioned participants in the present study were mostly novices to blogging, attitudinal measures relating to blogging were also collected. On a few 9-point Likert items, participants were asked to indicate their levels of curiosity (E.g., I am very curious about blogging), interest (E.g., I think I will continue blogging after the study is over) and liking (E.g., I enjoyed blogging) as these related to the two-day blogging experience (see items 1 and 3-9 in Appendix C, p. 145).
Intervening Variables

The same SOC and SOA scales as in the survey were included here as well in order to (a) test for the comments-SOC and visits-SOA proposed connections and (b) include them as mediators in the journaling part of the study, due to the fact that comments and site visits could not be manipulated in the diary condition.

Sense of community. In the blogging part SOC was assessed using the rephrased twenty-two items as in the survey (e.g., I expect that if I raise questions in this blog they will be answered by readers, I expect to get support from those following my blog). In the journaling part, due to the inadequate translation of the adapted SCI to the diary-keeping context, only the one question pertaining to the community “spirit” was used to assess perceived sense of community (e.g., Blogging/Writing in a diary can make me feel part of a larger community).

Sense of agency. Both the blogging and the journaling parts of the study employed the same three SOA measures as in the survey rephrased as follows: “Blogging/Writing in a diary can make me feel I have control over my voice,” “Blogging/Writing in a diary can enable me to assert myself,” and “Blogging/Writing in a diary can make me feel I can assert myself” study (for a complete list of measures included in the blogging and journaling parts of the study, see Appendix C, p. 145, and Appendix D, p. 154 respectively).

Manipulation Check

Two manipulation check measures were included in the full-factorial design in order to assess the efficacy of the comments and site visits
manipulations. Participants were first asked to indicate the number of comments and site visits their blogs received on each of the two study days, then rate those numbers on a 9-point scale ranging from “1” representing “Very Few” to “9” representing “A Lot.”

Procedure

Part 1. Full-Factorial Blogging Experiment

At the time of recruitment participants were told they were invited to take part in a two-day “Blogging Usability and Popularity Study,” aimed at exploring how usable freely available blogging softwares were, as well as how long it took for newly created blogs to become visible to others and circulate in the blogosphere. The evening before the day participants signed up to start the study, they were sent a very detailed set of instructions as an e-mail attachment (see Appendix E, p. 159), explaining how and when to execute each study task, using screenshots as visual aids. First, participants were asked to create a blog using WordPress, a freely available software. Next, participants had to write a blog entry of at least 100 words on a given theme. When finished with these two tasks, participants were asked to send their blog url to the researcher, no later than 11:30 AM on the first study day (third task). The evening of that same day, no later than 7:30 PM, participants were asked to complete a fourth task, i.e., check any feedback their blog entry might have received in the form of comments and site visits, and note those down on the study checklist. This fourth task completed the first study day. The following day, participants were asked to once again to check feedback to their blog no later than 7:30 PM, at which point they also completed the sixth and final step of the study by filling
out the follow-up online questionnaire assessing their blogging experience. All participants read an implied consent form prior to their participation.

*Part 2. Journaling Experiment*

The diary part of the journaling experiment was administered to students in a computer laboratory containing ten computers, and described as “The Writing Study”. This part of the study was also run in several sessions across a few days. In order to ensure enough privacy, no more than five participants could sign up for any given session. Upon their arrival to the lab, participants were asked to have a seat at the computer desks where they could see a pencil and envelope. There were five desks in all, were fully protected with dividers from adjacent desks, and had one unusable computer desk in between. As soon as everyone was seated at their desks, participants were told they would first be asked to write a diary entry and then turn to their computers to fill out a follow-up online questionnaire. In order to start, they were told to open the envelope in front of them which contained more detailed printed study instructions as well as a an empty sheet of paper, and start writing after reading the instructions.

Following Pennebaker, Colder and Sharp’s (1990) protocol, the printed instructions read as follows: “Today’s study session asks participants to write a brief yet very personal entry, as if you were writing an entry in your personal diary. As you write, please do not be afraid to let go and write down your deepest thoughts and feelings about anything that has to do with your personal life - innermost feelings, personal experiences, personal issues, relationships, health, etc. While the entry does not need to be very long (at least 100 words), the important thing here is to really let go and pour your thoughts and feelings out
as you would in a personal diary.” When participants had finished writing their diary entry, they turned to the computer in front of them in order to complete the study by filling out the online questionnaire. Once finished with the questionnaire, they were thanked for their participation and asked to drop the writing samples in a box by the door.

Index Construction and Preparation for Data Analysis

Part 1. Full-Factorial Blogging Experiment

An exploratory factor analysis was performed on the twenty-two items pertaining to empowerment. It yielded two factors with eigenvalues greater than one, accounting for 76.39% of the total variance explained. Six items loaded under the first factor labeled “autonomy & control.” This item exhibited a high degree of internal consistency (Cronbach’s \( \alpha = .95 \)). Other six items loaded reliably under the second factor, “sense of influence” (Cronbach’s \( \alpha = .92 \)). The remaining ten items were dropped from any further analyses given that they cross-loaded on both factors (see Table 11).

The SOC and SOA scales were also checked for internal consistency, both yielding very high reliability coefficients (Cronbach’s \( \alpha = .88 \) & .92 respectively).

Part 2. Journaling Experiment

The same exploratory factor analysis was performed on the twenty-two items pertaining to empowerment when combining the diary and personal blogging conditions together, which yielded two factors accounting for 73.03% of the variance explained. Eleven items loaded under the first factor labeled “autonomy & control” (Cronbach’s \( \alpha = .96 \)) and eight items loaded under the
second factor named “sense of influence” (Cronbach’s $\alpha = .94$). Three items cross-loaded and were therefore dropped from further analyses (see Table 12).

Further, the SOA scale was also reliable (Cronbach’s $\alpha = .90$).

Results

Part 1. Blogging Experiment

Manipulation Check

Two tests were conducted to assess the efficacy of the comments and site visits manipulations. First, an independent sample t-test showed that participants in the high number of comments condition rated the number of comments received as significantly higher ($M = 6.47, SD = 1.64$) than participants in the low comments condition, ($M = 2.47, SD = 1.64$), $t(191) = 16.91, p < .001$. A second t-test further revealed that participants in the high site visits condition perceived the number of visits their blogs received as indeed higher ($M = 6.86, SD = 2.02$) than participants in the low site visits condition ($M = 5.13, SD = 1.69$), $t(207) = 6.74, p < .001$.

The second manipulation check pertains to testing the proposition that comments function as a proxy for SOC and site visits as a proxy for SOA. To this end, two separate analyses of variance (ANOVAs) were conducted on SOC or SOA as the dependent variable. The first of these analyses revealed only a significant main effect for comments on SOC, such that a high number of comments per blog entry induced a stronger perceived sense of community in participants ($M = 4.60, SE = .11$) than a low number of comments ($M = 4.21, SE = .11$), $F(1, 202) = 6.34, p < .01, \text{partial } \eta^2 = .03$. The second analysis revealed a significant main effect for site visits on SOA, such that a high number of site
visits on one’s blog imbued participants with a stronger perceived sense of agency ($M = 5.87, SE = .20$), than a low number of site visits ($M = 5.22, SE = .20$), $F(1, 202) = 5.44, p < .05$, partial $\eta^2 = .02$. These findings provide full support for H1, H1a, H2, and H2a.

Psychological Empowerment

A 2 (Type of Blog) X 2 (Comments) X 2 (Site Visits) multivariate analysis of variance (MANOVA) was performed to assess participants’ perceived autonomy & control and sense of influence. This analysis revealed a multivariate significant main effect for visits, Wilks’ $\Lambda = .96, F(2, 201) = 4.48, p < .01$, partial $\eta^2 = .04$, and type of blog, Wilks’ $\Lambda = .97, F(2, 201) = 3.33, p < .05$, partial $\eta^2 = .02$.

The univariate analysis for autonomy & control revealed no significant main or interaction effect. The univariate analysis for sense of influence revealed a significant main effect for site visits, such that participants whose blogs recorded a high number of visits showed a significantly stronger perceived sense of influence ($M = 5.51, SE = .17$) than those participants whose blogs recorded a low number of site visits ($M = 4.83, SE = .17$), $F(1, 202) = 8.24, p < .01$, partial $\eta^2 = .04$. A marginally significant main effect for comments was also revealed, indicating that participants showed a significantly stronger perceived sense of influence when their blog entry received a high number of comments ($M = 5.39, SE = .17$) than a low number of comments ($M = 4.92, SE = .17$), $F(1, 202) = 3.28, p = .07$, partial $\eta^2 = .02$. These analyses failed to provide support for H3 and H4.

Given the lack of support of the moderated mediation model, subsequent analyses were conducted to assess the role of comments and site visits in eliciting
empowerment via the two potential mediators used in the survey, SOC and SOA.

The next mediation step involved assessing the influence of comments and site visits on the two mediators. Evidence of this influence was already revealed by the second manipulation check, and therefore the analysis was not repeated.

Next, a multiple regression was conducted with SOC and SOA as potential predictors of sense of influence. The overall regression model was significant, $F(2, 207) = 180.87$, $p < .001$, adjusted $R^2 = .63$, and SOC, $F(1, 208) = 212.49$, $p < .001$, adjusted $R^2 = .50$, and SOA, $F(1, 208) = 269.86$, $p < .001$, adjusted $R^2 = .56$, were both significant predictors of sense of influence. Table 13 displays the statistics associated with this analysis.

Finally, two separate analyses of covariance (ANCOVAs) were performed. First, SOC was included as a covariate when testing for the relationship between comments and sense of influence. The overall model was significant, $F(2, 207) = 105.74$, $p < .001$, partial $\eta^2 = .51$, but the main effect for comments was not anymore, controlling for SOC, $F(1, 207) = .01$, $p = .93$, partial $\eta^2 = .001$. Second, SOA was included as a covariate when testing for the relationship between site visits and sense of influence. This model was also significant, $F(2, 207) = 137.89$, $p < .001$, partial $\eta^2 = .57$, but the main effect for site visits was not, $F(1, 207) = 3.14$, $p = .08$, partial $\eta^2 = .02$. 
Attitudes Toward Blogging

A 2 (Comments) X 2 (Site Visits) X 2 (Type of Blog) MANOVA was performed to assess participants’ attitudes toward blogging (i.e., interest and perceived ease). This analysis revealed a multivariate significant main effect for visits, Wilks’ Λ = .96, \( F(2, 201) = 3.83, p < .05 \), partial \( \eta^2 = .04 \).

The univariate analysis for perceived ease of blogging revealed no significant main or interaction effect. The univariate analysis for interest revealed a significant main effect for site visits, such that when blogs received a high number of site visits, participants expressed significantly more interest in blogging (\( M = 4.78, SE = .19 \)) than when blogs received a low number of visits (\( M = 4.45, SE = .20 \)), \( F(1, 202) = 7.28, p < .01 \), partial \( \eta^2 = .04 \). A marginally significant three-way visits X comments X type of blog interaction was also obtained, suggesting that under low number of comments conditions, across type of blogs, participants whose blogs recorded a high number of visits showed significantly more interest in blogging (\( M_{\text{Personal}} = 4.96, SE = .42; M_{\text{Filter}} = 4.86, SE = .39 \)) than those whose blogs recorded a low number of visits (\( M_{\text{Personal}} = 3.78, SE = .39; M_{\text{Filter}} = 4.18, SE = .41 \)). Under high number of comments conditions, personal and filter blogs fare very similarly in terms of eliciting participants’ interest when receiving few site visits (\( M_{\text{Personal}} = 4.75, SE = .38; M_{\text{Filter}} = 4.27, SE = .40 \)); however, when receiving a lot of site visits, participants in the filter blog condition became more interested in blogging (\( M = 5.61, SE = .38 \)) than those in the personal blog condition (\( M = 4.52, SE = .37 \)), \( F(1, 202) = 3.41, p = .06 \), partial \( \eta^2 = .06 \) (see Figure 5).
The role of potentially intervening variables – SOC and SOA – was examined in the remaining two steps. First, the two separate analyses of variance (ANOVAs) were the same as the ones investigated in the comments, site visits and type of blog – empowerment relationship, revealing a main effect for comments on SOC, $F(1, 202) = 6.34, p < .01$, partial $\eta^2 = .03$, and one for site visits on SOA, $F(1, 202) = 5.44, p < .05$, partial $\eta^2 = .02$. No significant three-way interaction was revealed on either SOC, $F(1, 202) = .66, p > .05$, partial $\eta^2 = .003$, or SOA, $F(1, 202) = .35, p > .05$, partial $\eta^2 = .002$.

Next, a linear regression was conducted with SOA as a predictor of interest, and as the only possible mediator of the site visits – interest in blogging relationship. SOA proved to be a significant predictor of interest, $F(1, 208) = 165.82, p < .001$, adjusted $R^2 = .44$.

Lastly, one ANCOVA was conducted by treating SOA as a covariate when re-examining the relationship between site visits and level of interest in blogging.
This was revealed to be non-significant, $F(1, 207) = 2.07, p = .15$, partial $\eta^2 = .01$ (see Figure 6 for a summary of findings in the blogging experiment).

Figure 6. Diagram illustrating the summary of findings in the blogging experiment

Part 2. Journaling Experiment

A one-way MANOVA was conducted to examine participants’ perceptions of autonomy & control and sense of influence as a function of the type of journaling they had engaged in. This analysis revealed a significant main effect for journaling condition, Wilks $\Lambda = .50, F(2, 127) = 64.71, p < .001$, partial $\eta^2 = .51$.

At the univariate level this analysis revealed a significant main effect for journaling on autonomy & control, with diary condition participants reporting significantly higher levels of perceived autonomy & control ($M = 6.92, SE = .38$) than the blog condition participants ($M = 4.93, SE = .18$), $F(1, 128) = 22.01, p <$
.001, partial $\eta^2 = .15$. Further, the effect of journaling on sense of influence was also shown to be significant, with participants in the blog conditions exhibiting a significantly stronger sense of influence ($M = 4.86$, $SE = .17$) than participants in the diary condition ($M = 3.57$, $SE = .37$), $F(1, 128) = 9.92$, $p < .01$, partial $\eta^2 = .07$. These findings provide support for both H5 and H7.

As in the previous studies, further analyses were conducted to examine whether the potential intervening variables affected the relationship between journaling and empowerment.

First, a series of one-way ANOVAs with the journaling condition as independent variable and SOC, SOA as separate dependent measures was conducted. The first analysis revealed a significant main effect on SOC, $F(1, 128) = 28.92$, $p < .001$, partial $\eta^2 = .18$, revealing that participants in the blog conditions perceived the sense of community to be much stronger ($M = 2.61$, $SE = .46$) than participants in the diary condition ($M = 5.36$, $SE = .22$). The second analysis revealed only a marginal main effect on SOA, $F(1, 128) = 3.57$, $p = .06$, partial $\eta^2 = .03$, suggesting that participants in the diary condition exhibited a stronger sense of agency ($M = 6.38$, $SE = .40$), than those in the blog condition, ($M = 5.54$, $SE = .19$).

Next, a multiple regression was first performed by regressing autonomy & control on both SOC and SOA, which proved significant, $F(2, 127) = 153.56$, $p < .001$, adjusted $R^2 = .70$, with only SOA as significant predictor, $F(1, 128) = 307.81$, $p < .001$, adjusted $R^2 = .70$. The next analysis regressed sense of influence on SOC and SOA. The overall regression, $F(2, 127) = 104.23$, $p < .001$, adjusted $R^2 = .62$ was significant, and so were SOC, $F(1, 128) = 148.28$, $p < .001$, and SOA, $F(1, 128)$
= 80.94, \( p < .001 \) as predictors. Table 14 reports the statistics associated with these analyses.

Finally, subsequent ANCOVA analyses were conducted on each of the two empowerment factors. The first of these analyses examined whether SOA mediates the relationship between type of journaling and autonomy and control, therefore SOA was included in the model as a covariate. This analysis revealed that the significant main effect for journaling on autonomy & control persisted, \( F(1, 127) = 33.60, \ p < .001, \ \text{partial } \eta^2 = .21 \). A follow-up Sobel test revealed that SOA did serve as a marginally significant mediator of this relationship (Sobel test statistic = 1.87, \( p = .06 \)). Next, ANCOVA was conducted to investigate the mediated relationship between journaling and sense of influence by first including SOC, \( F(1, 127) = .726, \ p = .40, \ \text{partial } \eta^2 = .01 \), and then SOA, \( F(1, 127) = 38.06, \ p < .001, \ \text{partial } \eta^2 = .23 \), as covariates in the model. As the reported main effects for journaling indicate, SOC served to mediate the relationship between type of journaling and sense of influence, but SOA did not. Thus, H6 was fully supported, while H8 received only partial support.

Figure 7. Diagram illustrating the summary of findings in the journaling experiment
Discussion

In sum, results of this second study come to provide further support for blogs’ empowering potential, offering a series of interesting insights.

*Full factorial experiment.* To start with, the second of our manipulation checks is noteworthy. The reasoning behind manipulating number of comments and site visits was that they would serve as proxies for SOC and SOA. Consistent with this reasoning, it was successfully revealed that in the realm of blogging a high number of comments serves to elicit a deeper SOC, while a large number of site visits serves to primarily prompt a greater SOA. This finding is of particular theoretical import, being one of the first of its kind to empirically and unambiguously test for blanket statements purporting blogging’s ability to instill SOC and SOA by way of their embedded technological functions.

Most surprisingly, there was an almost total absence of an effect of type of blog on psychological empowerment. One possible reason for this may be that the brevity of the actual blogging activity (i.e., participants wrote only one entry of about one hundred words) may not have allowed participants enough time to internalize blogs as a vehicle for either self-expression or opining. Along the same lines, it may also be that, psychologically, participants did not make a distinction between personal or internal and non-personal or external. As second-wave feminists have powerfully stated, “the personal is political,” suggesting there is little distinction between one’s personal life and “external” events (e.g., social, political). Given that the present sample was entirely made up of women, this possibility gains even more credence.
Worth noting, in this regard, is the fact that follow-up analyses revealed that irrespective of the type of blog one wrote, their sense of influence was elicited on the one hand by number of site visits through SOA, and by number of comments through SOC on the other hand. Consistent with the reported survey findings, it was once more confirmed that not only do the embedded functionalities of blogs elicit a deeper SOC and SOA, but they serve to ultimately empower women.

Surprisingly, there was no significant effect whatsoever on the other empowered outcome emerging from the present study, i.e., autonomy & control. While it is understandable that the number of site visits would not affect one’s sense of autonomy & control, given this outcome’s inward orientation, the fact that number of comments and type of blog did not affect it is rather curious. It is possible however that developing feelings of autonomy & control with respect to one’s life does depend so much on the quantity of comments, but on their quality. As already mentioned, comments were formulated in this study in a relatively neutral manner, which might have failed to provide bloggers the necessary support to be able to instill in them a deeper sense of autonomy & control. While this particular finding is consistent with the lack of evidence shown in the survey, the link between type of blogging and autonomy & control is not. More specifically, it was revealed in the survey that personal blogging positively affects one’s sense of control, by imbuing users with a deeper SOA. The fact that this particular finding was not replicated in the present study may have to do on the one hand with the different sample composition, but also with the “forced” nature of the blogging activity encouraged by the experimental
procedure. In other words, it may very well be that bloggers writing about personal issues by choice do so more sincerely interested in a deeper understanding of those issues, whereas participants in the present experiment did mainly because they were told to. Furthermore, the level of understanding of one’s situation necessary for a deeper sense of autonomy & control, is unlikely to have occurred in one brief blogging session, as was the case of this experiment.

One last noteworthy finding pertains to the interest piqued in blogging by both number of site visits and the already discussed visits X comments X type of blog interaction. This particular finding is particularly promising considering the short duration of the study. Getting a glimpse of the potential beneficial outcomes of blogging, participants became curious about and interested in this communication vehicle. Given the behavioral intention component included in the interest measure, it becomes reasonable to assume that at least for some of the participants this interest will translate in adoption perhaps in order to replicate and maximize the positive experience.

Journaling experiment. Findings from the second part of this experiment further indicate that personal diaries are both theoretically and practically different from personal blogs. Most notably, these two venues differ in the sense of community they elicit, with personal blogs scoring much higher than personal journals. In line with this finding, it was further shown that this relationship extends further to include sense of influence, such that participants who wrote personal blogs derived a greater sense of influence via a greater sense of community than participants who wrote a personal diary entry.
Conversely and interestingly, participants who wrote a personal diary entry as opposed to a personal blog entry were shown to derive a stronger sense of autonomy & control from their activity. This particular finding may be explained by diary-writing’s more private nature, which may encourage a more unfettered and deeply personal outpour of innermost feelings. Writing about personal matters this way most likely translates into a deeper understanding of oneself, and therefore a stronger sense of autonomy & control over one’s life or aspects of one’s life. It may also be that the slightly different instructions across the journaling conditions may have encouraged a greater focus on deeply personal issues in the diary than in the personal blog condition. For purposes of consistency in protocol with other well reputed writing studies (e.g., Pennebaker, Colder & Sharp, 1990), the instructions for the diary condition asked participants to let go of their innermost feelings and put them on paper, while this might have sounded odd in the personal blog condition.

Overall, these findings clearly highlight the difference between these two mediums of self-expression by revealing their distinct psychological implications. They also reveal the trade-offs between them, suggesting that while still an excellent venue for self-expression, blogs can be empowering by instilling in users a stronger sense of community, whereas personal diaries are empowering more inwardly.

Limitations

*Full factorial experiment.* One limitation of this study pertains to the inability to use the initially planned covariate, i.e., importance of the issue blogged about. While this variable could have provided useful insights, it was
rendered unusable as a covariate by a fault in the study design. That is, importance of the issue was included in the final post-questionnaire, just like any other dependent measure. Given that it was measured after the manipulation was implemented it certainly became an outcome, rather than a covariate. In fact, a 2 (type of blog) X 2 (comments) X 2 (site visits) analysis of variance revealed a host of significant findings. First, a main effect for visits, $F(1, 202) = 3.77, p < .05$, suggesting that participants perceived the issue they wrote about as more important after receiving a high number of site visits ($M = 6.53, SD = .20$) than when receiving a low number of site visits ($M = 6.04, SD = .20$). A second main effect for type of blog, $F(1, 202) = 6.43, p < .01$, indicating that participants assigned to the filter condition perceived the issue they wrote about as more important ($M = 6.67, SD = .20$) than participants in the personal journaling condition ($M = 5.96, SD = .20$). Finally, a comments X type blog interaction, $F(1, 202) = 3.75, p < .05$, further revealed that the difference between filter blogging and personal journaling was negligible under conditions of high comments ($M_{Filter} = 6.64, SD = .28; M_{Personal} = 6.47, SD = .29$), whereas under low comments conditions, participants in the filter condition rated the issue they wrote about as more important ($M = 6.69, SD = .29$), than those in the personal journaling condition ($M = 5.44, SD = .29$). Altogether, these findings suggest that importance of the issue behaved in the present study as an outcome instead of a covariate. For it to behave as planned, it would have had to be asked either before the treatment or right after participants blogged, but before any of the manipulations were implemented.
Further, while the present study exhibited very good ecological validity, the study being conducted in participants’ own environment, at their own pace, the sample employed in the present study poses threats to the overall external validity. As shown in the previous survey, the mean age of actual women bloggers was 33.4 (SD = 8.34), while the mean age of participants in this study was only 20.44 (SD = 2.58), which poses issues of how representative this particular sample is. This raises further concerns when thinking about the highly variable nature of empowerment (i.e., the way young college girls feel empowered might be totally different than the way well-educated women in their mid-thirties do), but might also explain the slightly different factor structures of empowerment across the two studies.

*Journaling Experiment.* Besides the already discussed age factor, the diary-writing vs. blogging outcome comparison may pose additional threats to the generalizability of the findings. First, the setting in which participants completed the study was not the same across the two experimental conditions. That is, participants in the blogging conditions completed the experimental tasks in their own environment, whereas those in the diary condition did it in a computer lab. The main reason for this difference in treatment was prompted by the wish to collect writing samples from all participants, irrespective of the medium of delivering that writing. This procedural decision may have influenced, however, the way participants approached and responded to the experimental tasks. Second, as already mentioned, in an attempt to be consistent with the typical protocol employed in diary writing studies (Pennebaker, Colder, & Sharp, 1990), the diary condition instructions may have overemphasized the personal nature
of participants’ writing. As a result, this may have introduced a potential confound, making it unclear whether any differences observed between the diary and the personal blog condition are due to the medium or the degree of “personalness” of one’s writing.

General Discussion

Considered together, the findings of the two studies reported in this dissertation offer strong empirical evidence for the empowering potential of blogs, bringing to the fore several noteworthy theoretical and practical implications, in addition to those discussed in response to each of the two studies individually.

Theoretical Implications

Most notably, the studies presented here succeeded in building a blogging-specific framework for the concept of psychological empowerment. The first study revealed that this framework is strongly consistent with previous conceptualizations of empowerment, most obviously to Shields’ (1995) typology. In her study of women’s understanding of empowerment, three themes had emerged: internal self (similar here to autonomy & control), knowledge and competence to take action in accord with this internal self of sense (similar to perceived sense of influence), and connectedness (labeled here interconnectedness). The emerging framework was further fairly consistent across studies, with the exception that in the experimental studies it was reduced to two empowerment components as opposed to three. Interconnectedness did not emerge as an empowered outcome in either the full-factorial or the journaling experiment. The reason for this may lie in the nature of the blogging
activity across the survey and the experimental studies. More specifically, while in the first study it reflected the authors’ intentions and, as it was also shown, their particular motivations, the one in the experiment was dictated by the researcher. As Lampa (2004) put it, “(...) it is generally understood that a blog directly represents the intent of the person who produces it” (p. 2, italics added); however, this was not the case in the experimental part of this dissertation, and thus it becomes reasonable to assume that this might have affected the typical outcomes of blogging. Furthermore, as already mentioned before, the experimental study consisted of only one brief blogging session, while the survey was based on blogging experiences as extensive as ten years. As such, while SOC was shown to emerge even in from the limited and “forced” blogging activity allowed by the experimental study, it may take longer than that and a more voluntary basis for the actual perception of interconnectedness to emerge as a potential empowered outcome. Lastly, the age factor may have well affected this particular outcome as well, in that the threshold for feeling interconnected as a result of media activity might be considerably different across young college girls (as the experiment participants) and adult women (as the women bloggers in the survey). With this in mind, it may not be too presumptuous to state that not only were the present studies able to closely replicate previous empowerment typologies, but they also managed to reveal some of their boundaries, as manifest in the behavior of the interconnectedness component.

Another worthy theoretical contribution lies in the examination of the psychological sense of agency and sense of community in the specific context of blogging. SOC and SOA have rich psychological ramifications. First, despite
pessimistic initial evidence (Blanchard, 2004), it was revealed in the two studies of this dissertation that when conceptualized following the long established community psychology perspective, SOC is a valid construct in the realm of blogging, and that blogs do offer a bona fide space for virtual communities. One potential way to reconcile Blanchard’s (2004) somewhat discouraging predictions with these findings involves the fact that while in her study SOC estimates were generated by blog readers, in both studies presented here the same estimates were given by bloggers. With regard to SOA, it was further shown that agency as voice is perhaps the most apposite conceptualization when it comes to blogging. This is consistent with both the agency model of customization (Sundar, 2006) and the notion of voice presented by Mitra (2004, 2005). A literature search did not yield, however, any study that has empirically examined this particular conceptualization in the blogging arena so far. In a related vein, this conception of agency revealed blogging as a viable venue for women to strengthen or acquire some of the agentic characteristics typically associated with men, i.e., competence, confidence and assertiveness, as proposed by social role theory (Eagly, 1987). While this might not change how others see them, social role theory explaining primarily how women and men are typically seen by others, changing the way women see and feel about themselves is perhaps an even more desirable outcome. This is consistent with some scholars’ suggestion that SOC and SOA are in fact desirable end states in themselves (Mcmillan & Chavis, 1986; Mitra, 2005). Consequently, considered independently of empowerment, it is certainly auspicious that most blogging-related variables were successful in eliciting either or both of these outcomes.
As mediators of the blogging–empowerment relationship, SOC and SOA provide two meaningful parallel theoretical routes towards psychological empowerment. Furthermore, coupled with the findings related to motivations for blogging, the theoretical underpinnings pertaining to SOC and SOA point to specific recommendations with respect to the best route towards a deeper sense of psychological empowerment, depending on the specific areas where one feels disempowered. For example, those who feel disempowered in aspects relating to their social network may undertake blogging as a means for meeting and connecting with similar others and become as a result more interconnected. Those who feel they would like to bring a contribution in the socio-political arena may consider undertaking blogging as a vehicle for expressing and honing their political voice and, as a result, gain a deeper sense of influence. Those who are at odds with themselves may undertake blogging as a way to express their angst but also receive validation from others, and therefore feel more autonomous and in control as a result.

These recommendations are consistent with the already documented fragmented nature of psychological empowerment. As previously mentioned, researchers have suggested that empowerment is highly context-specific and compartmentalized, that is, people feel empowered in different areas of their lives and to different extents (Zimmerman, 1995). This suggests that while people might feel empowered in their relationships with others (i.e., they are sufficiently interconnected), they may feel less empowered to enact goal-oriented behaviors (i.e., experiencing a low sense of influence). Further, it was suggested that psychological empowerment takes different forms for different people (see
Zimmerman, 1995). That is, it may take drastically different strategies for teenage girls than for highly educated professional women to become empowered, which may serve to explain in part those survey findings that were not replicated in the experiment.

Findings involving motivations for blogging and blogging experience as predictors of psychological empowerment also serve to inform theories of active audience, such as the Uses and Gratifications perspective (Blumler & Katz, 1974; Rubin, 1994), which put the focus more on the user than on the communication media themselves. It was revealed here that psychological empowerment was a direct result of one’s motivations for blogging and the effort invested in it as both blogger and reader. As such, it would not be too much to say that when it comes to blogs, psychological empowerment is a not just an ideal. That is, the findings reported here revealed that, as long as one is motivated to become more empowered and puts enough effort into it, blogging provides her with full control and a feasible way to achieve that.

Additionally, in light of the discussed findings involving SOC and SOA, they have further significance for the U & G approach. As revealed in the survey study, all motivations for blogging were successful in eliciting either SOC or SOA and, in some cases, both (e.g., motivations to explore oneself), in influencing the various components of psychological empowerment. These relationships point to possible adjustments to the U & G perspective in order for it to gain more predictive power in investigating new media, and particularly blogs. More specifically, given the myriad of uses blogs can be put to, it becomes important to consider the associations between certain motivations for blogging and SOC
and/or SOA, in order to create a perhaps more useful and parsimonious model of uses and gratifications of blogs. For example, in a recent study investigating the uses and gratifications of blogging (Papacharissi, 2006), the author was able to identify ten unique reasons for authoring a blog. Similarly, another study investigating motivations for reading/following blogs (Kaye, 2006) detected no less than sixty-four such motivations, which later emerged in ten motivational blocks. Several items in both studies were unambiguously indicative of either SOC (e.g., family communication, social communication with friends) or SOA (e.g., personal expression, ability to show off a creative side or artistic work, provision of information).

Findings reported here also serve to inform and provide some initial support for the agency model of customization (Sundar, 2006). Simply put, this model argues that self as source (that is, one’s sense of personal agency) serves as a key mediator between technological variables such as interactivity, modality and navigability and various psychological outcomes. The real focus of the model rests on the technological aspects (i.e., precursors of personal agency) however, and does not identify the particular psychological outcomes triggered by users’ sense of personal agency (i.e., effects of one’s sense of personal agency). Results of these studies come to fill in the gaps with regard to the psychological end of the model by unveiling psychological empowerment as just one powerful consequence of “self as source.” Future studies may similarly investigate other cognitive, affective and behavioral outcomes. For instance, does the deeper SOA derived from blogging encourage a greater degree of civic participation and engagement?
Finally, another important theoretical contribution of the present dissertation pertains to the clarification of blogs’ similarities and differences to diaries. More specifically, it was shown that while diaries lack the SOC aspect of blogging, they are more SOA-enhancing than personal blogs. As a result, diaries were also shown to be more successful than personal blogs in eliciting autonomy & control, while personal blogs were revealed as better capable to imbue users with the sense of influence than personal diaries. These findings have clear implications for the clinical psychology research focusing on the therapeutic benefits of diary-keeping for both mental (e.g., Pennebaker, Colder, & Sharp, 1990) and physical health (Floyd, Mikkelson, Hesse, & Pauley, 2007; Pennebaker, Colder, & Sharp, 1990), in that blogs can offer an additional venue for examining the effects of writing on mental and physical well-being. It may be that the SOC component lacking in diary-keeping brings significant contributions to one’s betterment through writing. There is at least one initial indication that this might be the case, revealing that blogs offer mental health patients a powerful vehicle for coping (e.g., Sundar et al., 2006). Furthermore, given the focus on community-building and assertiveness in feminist therapy empowerment programs (see Enns, 2004), the present findings may provide useful insights by highlighting one possible avenue towards psychological empowerment.

Practical Implications

In addition to the theoretical implications highlighted in the foregoing discussion, there are several practical implications worth noting. First and foremost, the findings of the present dissertation have direct practical implications for members of marginalized groups themselves. Given their
frequent misrepresentation and at times outright exclusion from mainstream media discourses, it becomes imperative that members of these groups are alerted to the potential offered by blogging technologies to enable users to steer their own psychological empowerment, by choosing to take control of their own voice and representation.

These implications could also extend to areas like activism, education, support groups, feminist therapy and other organizations working towards women’s empowerment and being in a position to alert them to the full empowering potential of blogging. As Mitra (2004) put it, “[t]o some degree, there needs to be an urgency to this project because the Internet can be shaped to become what the various Netizens want it to become, but by not voicing, it is likely that the Internet will become what many other media of mass communication have become: bastions of the powerful where the relatively powerless have remained silent and silenced” (p. 507). Moreover, as revealed in the two studies of this dissertation, blogs are not only a vehicle for developing and taking control of one’s voice, but a viable venue enabling users to build community, or what Putnam (1995, 2000) called “social capital,” that is, the materialization of what several other scholars have labeled as “power with” (Miller, 1976; Kreisberg, 1992; Bookman & Morgen, 1984).

Findings from this dissertation have further implications for media industries. In a recent article, Herring et al. (2004) discussed the ways in which public discourses of blogs serves to marginalize women bloggers. More specifically, “contemporary discourses about weblogs, such as those propagated through mainstream media, in scholarly communication, and in weblogs
themselves, tend to disproportionately feature adult, male bloggers” (Herring et al, 2004, p. 2). This stance is consistent with recent findings revealing stark gender differences across the lower- vs. upper-rungs of the blog hierarchy (Harp & Tremayne, 2006; Levy, 2006) and suggesting that while the blog A-list is male-dominated, the lower-rungs of the blogosphere are more of a female territory. In this regard, it has been posited that while blogs can be ‘democratizing’ and ‘equalizing’ by giving voice to diverse populations, socially equitable outcomes of blogging might still be underway as long as gender and age-based hierarchies continue to be reproduced in the blogosphere (Herring et al., 2004). Given the empowering potential of blogs clearly articulated in this dissertation, it becomes imperative that media discourses do not work to counteract it but to strengthen it, if at all.

The findings revealed in this dissertation have obvious implications for domains like education, health and journalism, as well. Research on the role of blogs in education has already documented the benefits brought by their integration in classroom instruction (Brooks, Nichols & Priebe, 2004; Godwin-Jones, 2003). Blogs have been noted for helping students develop their voice (Brooks, Nichols & Priebe, 2004), fostering collaborative learning environments (Godwin-Jones, 2003), and increasing participation for shy and quiet students (Lowe & Williams, 2004). The present findings further suggests that blogging may serve to empower them to take more active control over their own learning processes, by way of developing their own voice and sharing it in dialogue with others. These suggestions may be particularly useful for classes with a strong
writing component or in cases when the class size does not permit a great deal of in-class teacher-student and student–student interaction.

There is at least one published article documenting the potential benefits of blogging for one’s health and well-being (Sundar et al., 2006). While much has been said about the advantages of being a net-savvy patient (Pew Internet & American Life Project, 2005), this study provides initial empirical evidence that blogging as a health communication tool can provide important coping and therapeutic benefits. Indeed, by enabling users to document their health, share health information with others, provide and receive support, the positive implications for patients are easily discernible.

The transformative implications of blogging for traditional journalism are perhaps the most ardently debated and discussed in mainstream rhetoric surrounding blogs. Although seen by some as a threat to the qualities that have for so long qualified traditional journalism (see Carroll, 2004), blogs’ implications for democracy are more than obvious. By releasing traditional gatekeeping functions, and enabling bloggers to assert their unique voice, critique and commentary without objectivity concerns, blogs are currently the most common vehicle for radical and progressive reporting. In light of our findings, it becomes reasonable to expect that “blog journalism” is a growing phenomenon, representing increasingly diverse empowered voices and perspectives.

Finally, the findings presented here raise questions that may well inform our knowledge of the Internet digital divide. One such question pertains to whether our results point to the enhancement or reduction of the digital divide when it comes to blog use. As noted earlier, research has shown that the
blogosphere is fairly balanced in terms of gender, with only a slightly greater proportion of men, than women bloggers (Harp & Tremayne, 2006; Herring et al., 2004; Viégas, 2005). Given the documented potential for psychological empowerment through blogging for women, one can only expect a rise in the proportion of women bloggers in the future, making blogs perhaps one of the most egalitarian technologies there is. Conversely, however, it is just as likely that women may start to blog less and less, given recently revealed intimidation tactics. Coverage in the popular press in the first few months of 2007 has been abundant in presenting and discussing evidence that women bloggers receive more negative and at times life threatening feedback than male bloggers, pushing them to stop blogging (The Guardian, 2007; Nakashima, 2007). Continued monitoring and awareness-raising of gender discrepancies in the blogosphere are needed in order to correctly assess the state of the digital divide when it comes to blogs.

**General Limitations**

The general conclusion of the present dissertation, i.e., that blogs can be empowering for members of the marginalized groups, can only be stated by acknowledging a few caveats. Besides the study-specific limitations already discussed in the previous discussion sections, there are other overall concerns with respect to the conclusion of the present dissertation. As already implied above, it first has to be noted that blogs are overwhelmingly text-based media (Trammell & Keshelashvili, 2006), and therefore their empowering potential for illiterate marginalized communities is questionable. As the makeup of our sample in both studies indicates, most women bloggers/participants were in fact
rather well-educated. While blogging might serve to empower well-educated women, it might adversely enhance illiterate women’s disempowerment. Thus, it can be said that blogging is only a limited empowerment tool, given that presupposes certain levels of access and literacy that are in themselves very empowering. Further, as Harding (1991) proposed in her standpoint theory, while women may be generally viewed as a marginalized, underprivileged group, they are not a homogenous, monolithic one. Economic condition, race, and sexual orientation all contribute to a woman’s position in society. Thus, conceptualizing women as a marginalized group is not without caveats in the first place, the problems with it becoming more evident when considering the specific make-up of our sample. Taken together, the above concerns point to an overall issue of external validity, i.e., the generalizability of the present findings.

One issue of debate worth noting pertains to whether the revealed psychological empowerment is real or imagined, given that it resides in bloggers’ minds. When it comes to self-perceptions relating to autonomy, perceived control, and free will, for example, research has been traditionally very divided, and many have contested the stance that such notions do exist in reality (e.g., Carver & Sheier, 1999; 2000). Just as the subjective experience of free will, for instance, does not necessarily make it real (see Carver & Scheier, 2000), one can argue that just because women bloggers feel psychologically empowered it does not necessarily mean they are truly empowered. Because empowerment generally most valuable when it leads to the ability to change one’s realities, a more important question pertains to whether psychological empowerment does translate behaviorally into action for social change. In other words, is the
distinction between real and imagined psychological empowerment important to consider when the ultimate desired outcome of such empowerment is social change? Researchers have argued that it is what people feel they can do that influences their actions (Zimmerman, 1990). Therefore, the feeling and experience of being psychologically empowered may be sufficient to lead to social change enterprises. Moreover, in their self-determination theory, Ryan and Deci (2000) have proposed that the three components of empowerment emerging in this dissertation, i.e. autonomy & control, sense of influence, and interconnectedness (labeled by them as autonomy, competence and relatedness), are three determinant factors leading to intrinsic motivational processes. As such, it becomes reasonable to assume that the experience of psychological empowerment for women bloggers is very likely to lead to other cognitive, affective as well as behavioral outcomes, such as actions for social change. This expectation is also forwarded by Sundar’s (2006) agency model of customization. At the same time, the real vs. imagined psychological empowerment debate becomes important in considering the success or failure of such behavioral outcomes as action for social change. While both real and imagined psychological empowerment may lead to action, when one is deluded with respect to how empowered they are, such action is highly likely to fail. With this in mind, it becomes important that future research attempts to distinguish between genuine and deluded empowered outcomes of blogging, and it may be concluded that psychological empowerment is necessary but not sufficient to bring about social change.

Finally, the relatively high correlations observed between the two
mediators and relevant psychological empowerment factors (i.e., sense of agency – autonomy & control, and sense of community – interconnectedness) raise concerns with regard to the conceptual distinction between them. While sense of agency was conceptualized as *control over one voice* and autonomy & control as *control over aspects of one’s life*, the two conceptualizations share the notion of control at their very core. Similarly, while sense of community was meant to refer to the *perceived* experience of community, and interconnectedness to its *actual* experience, both measures involved the bloggers’ subjective perceptions of being part of a community. While these concerns do not detract from the overall conclusion of this dissertation with respect to the empowering potential of blogs, future research may well explore distinct conceptualizations of both sense of community and sense of agency that exhibit better discriminant validity in relation to psychological empowerment.

*Suggestions for Future Research*

One particular avenue for future research rests in exploring the empowering potential of blogs for various marginalized groups in society – by gender, race, sexual orientation, and economic class. First, within the gender category, one potentially fruitful area of research pertains to determining psychological empowerment as a result of blogging for distinct groups of women, with specific areas in which they are marginalized. These could include women working in male-dominated domains such as engineering, academic women not making or losing tenure, for instance. Moreover, efforts to determine how psychological empowerment emerges (if at all) from the intersection of gender, race, class as well as sexual orientation would perhaps offer the most
enriching picture. As proponents of standpoint theory and other feminists alike have long suggested, investigating issues of gender without placing them in the context of race and class can only provide a very limiting picture, i.e. only one particular standpoint.

Furthermore, while the present study focused mainly on the perceived benefits of active, running blogs, presenting an almost utopian picture of this technology, leaving inactive, “defunct” blogs out of the picture eluded the darker side of marginalized voices’ presence in the blogosphere. As already noted, recent media attention to virtual abuse and harassment of women bloggers has in fact presented a rather grim picture of this darker side of blogging. A most recent case widely publicized involves Kathy Sierra, who had been writing in a popular software technology blog. In April 2007, she canceled a public talk she had to give, afraid to leave her yard. Sierra had been receiving increasingly abusive comments on her site, which culminated a few days before the said talk with direct death threats (The Guardian, 2007). This is only one of the many cases recently made public, indicative of a whole array of threats that come with women’s visibility in the blogosphere (Nakashima, 2007). These threats have prompted many women bloggers to quit the blogosphere, afraid for their lives. In light of this recent evidence, future research might also address issues surrounding the limits and boundaries of the psychological empowerment experienced by women bloggers. Is this empowerment sound and lasting or is it so tenuous as to be upstaged by the threats discussed above? Theoretically, this concern could translate into a potential useful manipulation of comments, which in the second study served as a proxy for sense of community. In other words, it
is most likely that it is not just the sheer number of comments that instills a strong sense of community in users, but also their nature.

Another potentially useful trajectory for future research unaddressed in this dissertation pertains to investigating the empowered outcomes of not only blogging, but of blog reading also. It is conceivable that for many maintaining a blog is not a viable option given time constraints or writing abilities, for example. In this respect, it becomes important to determine the ways in which readers themselves can derive a sense of psychological empowerment from the blogosphere.

For now, it was shown in the present dissertation that the activity of blogging inculcates in those undertaking it a strong sense of agency as well as a deeper sense of community, rendering them ultimately more psychologically empowered. While blogs may not be more than a technological fad that sooner or later will become obsolete and unfashionable, documenting their psychological and social effects from a theoretical standpoint is nonetheless important for comprehending future, as well as past, technologies. To this end, it is variable-centered rather than object-oriented approaches that will provide most meaningful insights and contributions to the understanding these rapidly changing new media and their role in shaping human communication (Sundar, 2006), and that will hopefully characterize future scholarship investigating blogs and their effects.
References


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## Appendix A

Table 1. *Factor Loadings Using Principal Components and Varimax Rotation for Motivations Scale*

<table>
<thead>
<tr>
<th>Motivations</th>
<th>Bring Change</th>
<th>Connect</th>
<th>Explore Oneself</th>
</tr>
</thead>
<tbody>
<tr>
<td>I blog because I want to change the world.</td>
<td>.87</td>
<td>-.06</td>
<td>-.04</td>
</tr>
<tr>
<td>I blog because I want to make this a better world.</td>
<td>.85</td>
<td>.16</td>
<td>-.05</td>
</tr>
<tr>
<td>I blog to educate others.</td>
<td>.82</td>
<td>.10</td>
<td>-.17</td>
</tr>
<tr>
<td>I blog because I want to bring about social change.</td>
<td>.81</td>
<td>-.06</td>
<td>-.05</td>
</tr>
<tr>
<td>I blog because I want to influence the way other people think.</td>
<td>.81</td>
<td>.16</td>
<td>-.19</td>
</tr>
<tr>
<td>I blog to convince others.</td>
<td>.78</td>
<td>.14</td>
<td>-.23</td>
</tr>
<tr>
<td>I blog because I have things to say to the world.</td>
<td>.77</td>
<td>-.04</td>
<td>-.05</td>
</tr>
<tr>
<td>I blog to provide information to other people.</td>
<td>.67</td>
<td>.21</td>
<td>-.23</td>
</tr>
<tr>
<td>I blog to assert myself.</td>
<td>.62</td>
<td>.16</td>
<td>.21</td>
</tr>
<tr>
<td>I blog because I want my ideas to be known to others.</td>
<td>.60</td>
<td>.14</td>
<td>-.09</td>
</tr>
<tr>
<td>I blog because I want to know people with similar interests.</td>
<td>.12</td>
<td>.87</td>
<td>-.07</td>
</tr>
<tr>
<td>I blog to meet people.</td>
<td>-.03</td>
<td>.84</td>
<td>.03</td>
</tr>
<tr>
<td>I blog because I want to interact with similar others through my blog.</td>
<td>.24</td>
<td>.83</td>
<td>.01</td>
</tr>
<tr>
<td>I blog because I want to develop new friendships.</td>
<td>-.02</td>
<td>.83</td>
<td>.14</td>
</tr>
<tr>
<td>I blog to connect with similar others.</td>
<td>.23</td>
<td>.77</td>
<td>.06</td>
</tr>
<tr>
<td>I blog because I want to get to know people with similar values.</td>
<td>.14</td>
<td>.76</td>
<td>.18</td>
</tr>
<tr>
<td>I blog to network.</td>
<td>.24</td>
<td>.70</td>
<td>-.12</td>
</tr>
<tr>
<td>I blog to get to know myself better.</td>
<td>-.03</td>
<td>-.06</td>
<td>.86</td>
</tr>
<tr>
<td>I blog to cope with my problems.</td>
<td>-.07</td>
<td>-.04</td>
<td>.81</td>
</tr>
<tr>
<td>I blog to explore aspects of my identity.</td>
<td>-.01</td>
<td>.15</td>
<td>.76</td>
</tr>
<tr>
<td>I blog to create a stronger sense of self.</td>
<td>.11</td>
<td>.14</td>
<td>.73</td>
</tr>
<tr>
<td>I blog to explore hidden aspects of my personality.</td>
<td>-.03</td>
<td>-.07</td>
<td>.73</td>
</tr>
<tr>
<td>I blog to vent about my own problems.</td>
<td>-.17</td>
<td>-.05</td>
<td>.70</td>
</tr>
<tr>
<td>I blog to document my life.</td>
<td>-.18</td>
<td>-.09</td>
<td>.67</td>
</tr>
<tr>
<td>I blog to keep track of my experiences.</td>
<td>-.20</td>
<td>.17</td>
<td>.65</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Eigen Value</th>
<th>7.55</th>
<th>5.51</th>
<th>3.03</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proportion of Variance</td>
<td>29.05</td>
<td>21.20</td>
<td>11.65</td>
</tr>
</tbody>
</table>
Table 2. Factor Loadings Using Principal Components and Varimax Rotation for Empowerment Scale

<table>
<thead>
<tr>
<th></th>
<th>Autonomy &amp; Control</th>
<th>Sense of Influence</th>
<th>Interconnectedness</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blogging gives me a deeper sense of self-awareness.</td>
<td>.89</td>
<td>-.01</td>
<td>-.08</td>
</tr>
<tr>
<td>I feel blogging enables me to know myself better.</td>
<td>.88</td>
<td>-.11</td>
<td>-.06</td>
</tr>
<tr>
<td>Blogging enables me to control some aspects of my life.</td>
<td>.81</td>
<td>-.01</td>
<td>-.02</td>
</tr>
<tr>
<td>Blogging has taught me things about myself I was not aware of</td>
<td>.81</td>
<td>-.01</td>
<td>-.09</td>
</tr>
<tr>
<td>before.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Blogging gives me a sense of control over my life.</td>
<td>.79</td>
<td>-.04</td>
<td>-.05</td>
</tr>
<tr>
<td>Blogging enables me to cope with my problems.</td>
<td>.75</td>
<td>-.22</td>
<td>-.05</td>
</tr>
<tr>
<td>I feel blogging has sharpened my thinking skills.</td>
<td>.69</td>
<td>.22</td>
<td>.20</td>
</tr>
<tr>
<td>Blogging make me feel more autonomous.</td>
<td>.69</td>
<td>.16</td>
<td>-.06</td>
</tr>
<tr>
<td>Through blogging I can become more articulate with my thoughts.</td>
<td>.66</td>
<td>.31</td>
<td>.22</td>
</tr>
<tr>
<td>Blogging has forced me to pay more attention to my thoughts.</td>
<td>.65</td>
<td>-.02</td>
<td>.15</td>
</tr>
<tr>
<td>I feel that through blogging I can motivate others to take action.</td>
<td>-.01</td>
<td>.91</td>
<td>-.01</td>
</tr>
<tr>
<td>I feel that through blogging I can motivate other people to become more involved in social issues.</td>
<td>-.01</td>
<td>.91</td>
<td>-.01</td>
</tr>
<tr>
<td>I feel that my blogging influences the way other people think.</td>
<td>-.01</td>
<td>.84</td>
<td>.14</td>
</tr>
<tr>
<td>I feel that blogging gives me the right skills to bring about social change.</td>
<td>.23</td>
<td>.78</td>
<td>.12</td>
</tr>
<tr>
<td>My blog serves to provide information that can benefit others.</td>
<td>-.05</td>
<td>.77</td>
<td>.15</td>
</tr>
<tr>
<td>Blogging enables me to meet similar others.</td>
<td>.13</td>
<td>-.02</td>
<td>.88</td>
</tr>
<tr>
<td>I feel that I connect very well with my readers.</td>
<td>-.02</td>
<td>.19</td>
<td>.76</td>
</tr>
<tr>
<td>I feel that I connect very well with other bloggers</td>
<td>.13</td>
<td>-.06</td>
<td>.74</td>
</tr>
<tr>
<td>Eigen Value</td>
<td>6.28</td>
<td>3.87</td>
<td>1.76</td>
</tr>
<tr>
<td>Proportion of Variance</td>
<td>34.92</td>
<td>21.52</td>
<td>9.77</td>
</tr>
</tbody>
</table>
Table 3. Summary Table of Regression Analyses for the Relationships between Type of Blogging and Psychological Empowerment

<table>
<thead>
<tr>
<th>Dependent Variables</th>
<th>Predictors</th>
<th>$\beta$</th>
<th>Zero-order correlations</th>
<th>Partial correlations</th>
<th>$t$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Autonomy &amp; Control</td>
<td>Personal Journaling</td>
<td>.29</td>
<td>.29</td>
<td>.29</td>
<td>5.53***</td>
</tr>
<tr>
<td>Sense of Influence</td>
<td>Personal Journaling</td>
<td>-.22</td>
<td>-.36</td>
<td>-.24</td>
<td>-4.59***</td>
</tr>
<tr>
<td></td>
<td>Filter Blogging</td>
<td>.48</td>
<td>.54</td>
<td>.49</td>
<td>10.21***</td>
</tr>
</tbody>
</table>

*Note: Beta coefficients are standardized.***$p < .001$
Table 4. Summary Table of Regression Analyses for the Relationships between Type of Blogging and Potential Intervening Variables

<table>
<thead>
<tr>
<th>Dependent Variables</th>
<th>Predictors</th>
<th>β</th>
<th>Zero-order correlations</th>
<th>Partial correlations</th>
<th>t</th>
</tr>
</thead>
<tbody>
<tr>
<td>SOC</td>
<td>Personal Journaling</td>
<td>.19</td>
<td>.19</td>
<td>.19</td>
<td>3.49***</td>
</tr>
<tr>
<td>SOA</td>
<td>Filter Blogging</td>
<td>.12</td>
<td>.12</td>
<td>.12</td>
<td>2.25*</td>
</tr>
</tbody>
</table>

Note: Beta coefficients are standardized.
*p < .05
***p < .001
Table 5. *Summary Table of Regression Analyses for the Relationships between Potential Intervening Variables and Psychological Empowerment*

<table>
<thead>
<tr>
<th>Dependent Variables</th>
<th>Predictors</th>
<th>$\beta$</th>
<th>Zero-order correlations</th>
<th>Partial correlations</th>
<th>$t$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Autonomy &amp; Control</td>
<td>SOC</td>
<td>.18</td>
<td>.36</td>
<td>.22</td>
<td>4.17***</td>
</tr>
<tr>
<td></td>
<td>SOA</td>
<td>.57</td>
<td>.63</td>
<td>.58</td>
<td>13.18***</td>
</tr>
<tr>
<td>Sense of Influence</td>
<td>SOC</td>
<td>.12</td>
<td>.20</td>
<td>.22</td>
<td>2.19*</td>
</tr>
<tr>
<td></td>
<td>SOA</td>
<td>.26</td>
<td>.30</td>
<td>.26</td>
<td>4.82***</td>
</tr>
<tr>
<td>Interconnectedness</td>
<td>SOC</td>
<td>.59</td>
<td>.63</td>
<td>.59</td>
<td>13.52***</td>
</tr>
<tr>
<td></td>
<td>SOA</td>
<td>.15</td>
<td>.33</td>
<td>.19</td>
<td>3.44***</td>
</tr>
</tbody>
</table>

*Note:* Beta coefficients are standardized.

* $p < .05$

*** $p < .001$
Table 6. Summary Table of Regression Analyses for the Relationships between Motivations for Blogging and Psychological Empowerment

<table>
<thead>
<tr>
<th>Dependent Variables</th>
<th>Predictors</th>
<th>β</th>
<th>Zero-order correlations</th>
<th>Partial correlations</th>
<th>t</th>
</tr>
</thead>
<tbody>
<tr>
<td>Autonomy &amp; Control</td>
<td>Change</td>
<td>.16</td>
<td>.11</td>
<td>.21</td>
<td>4.05***</td>
</tr>
<tr>
<td></td>
<td>Connect</td>
<td>.08</td>
<td>.27</td>
<td>.10</td>
<td>1.82+</td>
</tr>
<tr>
<td></td>
<td>Explore</td>
<td>.63</td>
<td>.65</td>
<td>.65</td>
<td>15.46***</td>
</tr>
<tr>
<td>Sense of Influence</td>
<td>Change</td>
<td>.85</td>
<td>.86</td>
<td>.85</td>
<td>29.90***</td>
</tr>
<tr>
<td></td>
<td>Explore</td>
<td>-.07</td>
<td>-.18</td>
<td>-.14</td>
<td>-2.61**</td>
</tr>
<tr>
<td>Interconnectedness</td>
<td>Connect</td>
<td>.64</td>
<td>.53</td>
<td>.49</td>
<td>10.23***</td>
</tr>
<tr>
<td></td>
<td>Ethnicity</td>
<td>.34</td>
<td>.04</td>
<td>.16</td>
<td>2.89**</td>
</tr>
<tr>
<td></td>
<td>Connect X</td>
<td>-.29</td>
<td>.18</td>
<td>-.13</td>
<td>-2.40*</td>
</tr>
<tr>
<td></td>
<td>Ethnicity</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: Beta coefficients are standardized.
* p < .05
** p < .01
*** p < .001
+ p = .07
Table 7. Summary Table of Regression Analyses for the Relationships between Motivations for Blogging and Potential Intervening Variables

<table>
<thead>
<tr>
<th>Dependent Variables</th>
<th>Predictors</th>
<th>β</th>
<th>Zero-order correlations</th>
<th>Partial correlations</th>
<th>t</th>
</tr>
</thead>
<tbody>
<tr>
<td>SOC</td>
<td>Connect (M2)</td>
<td>.46</td>
<td>.50</td>
<td>.44</td>
<td>8.92***</td>
</tr>
<tr>
<td></td>
<td>Explore (M3)</td>
<td>.10</td>
<td>.18</td>
<td>.11</td>
<td>1.97*</td>
</tr>
<tr>
<td></td>
<td>Change (M1)</td>
<td>.40</td>
<td>.37</td>
<td>.42</td>
<td>8.40***</td>
</tr>
<tr>
<td>SOA</td>
<td>Explore (M1)</td>
<td>.35</td>
<td>.26</td>
<td>.35</td>
<td>6.87***</td>
</tr>
<tr>
<td></td>
<td>Ethnicity</td>
<td>.12</td>
<td>.16</td>
<td>.14</td>
<td>2.60**</td>
</tr>
</tbody>
</table>

Note: Beta coefficients are standardized.

*p < .05  
**p < .01  
***p < .001
Table 8. Summary Table of Regression Analyses for the Relationships between Blogging Experience and Psychological Empowerment

<table>
<thead>
<tr>
<th>Dependent Variables</th>
<th>Predictors</th>
<th>β</th>
<th>Zero-order correlations</th>
<th>Partial correlations</th>
<th>t</th>
</tr>
</thead>
<tbody>
<tr>
<td>Autonomy &amp; Control</td>
<td>Frequency of Browsing</td>
<td>.15</td>
<td>.13</td>
<td>.14</td>
<td>2.67***</td>
</tr>
<tr>
<td></td>
<td>Posting Comments</td>
<td>-.11</td>
<td>-.08</td>
<td>-.11</td>
<td>-2.04*</td>
</tr>
<tr>
<td></td>
<td>Blogroll Size</td>
<td>.16</td>
<td>.15</td>
<td>.16</td>
<td>2.88***</td>
</tr>
<tr>
<td>Sense of Influence</td>
<td>Frequency of Updating</td>
<td>.12</td>
<td>.09</td>
<td>.12</td>
<td>2.12***</td>
</tr>
<tr>
<td></td>
<td>Ethnicity</td>
<td>.16</td>
<td>.14</td>
<td>.16</td>
<td>2.85***</td>
</tr>
<tr>
<td></td>
<td>Visits</td>
<td>.18</td>
<td>.18</td>
<td>.18</td>
<td>3.35***</td>
</tr>
<tr>
<td>Interconnectedness</td>
<td>Comments</td>
<td>.22</td>
<td>.22</td>
<td>.22</td>
<td>4.12***</td>
</tr>
<tr>
<td></td>
<td>Blogroll Size</td>
<td>.18</td>
<td>.18</td>
<td>.18</td>
<td>3.31***</td>
</tr>
</tbody>
</table>

*Note: Beta coefficients are standardized.

* p < .05
** p < .01
*** p < .001
Table 9. Summary Table of Regression Analyses for the Relationships between Blogging Experience and Potential Intervening Variables

<table>
<thead>
<tr>
<th>Dependent Variables</th>
<th>Predictors</th>
<th>β</th>
<th>Zero-order correlations</th>
<th>Partial correlations</th>
<th>t</th>
</tr>
</thead>
<tbody>
<tr>
<td>SOC</td>
<td>Comments</td>
<td>.15</td>
<td>.18</td>
<td>.15</td>
<td>2.68*</td>
</tr>
<tr>
<td></td>
<td>Visits</td>
<td>.11</td>
<td>.15</td>
<td>.11</td>
<td>2.04*</td>
</tr>
<tr>
<td></td>
<td>Blogroll Size</td>
<td>.17</td>
<td>.17</td>
<td>.17</td>
<td>3.12**</td>
</tr>
<tr>
<td>SOA</td>
<td>Blogroll Size</td>
<td>.46</td>
<td>.50</td>
<td>.44</td>
<td>8.92***</td>
</tr>
<tr>
<td></td>
<td>Ethnicity</td>
<td>.10</td>
<td>.18</td>
<td>.11</td>
<td>1.97*</td>
</tr>
</tbody>
</table>

*Note: Beta coefficients are standardized.
*p < .05
**p < .01
***p < .001
Table 10. Summary Description of Experimental Design

<table>
<thead>
<tr>
<th></th>
<th>Part 1 (Blogging)</th>
<th>Part 2 (Journaling)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Independent Variables</strong></td>
<td>1. Type of Blog (Personal vs. Filter)</td>
<td>1. Type of Journaling (Diary vs. Blog)</td>
</tr>
<tr>
<td></td>
<td>2. Comments (Low vs. High)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3. Site Visits (Low vs. High)</td>
<td></td>
</tr>
<tr>
<td><strong>Intervening Variables</strong></td>
<td>1. SOC</td>
<td>1. SOC</td>
</tr>
<tr>
<td></td>
<td>2. SOA</td>
<td>2. SOA</td>
</tr>
<tr>
<td><strong>Dependent Variables</strong></td>
<td>1. Empowerment</td>
<td>1. Empowerment</td>
</tr>
<tr>
<td></td>
<td>2. Attitudes toward Blogging</td>
<td></td>
</tr>
</tbody>
</table>
Table 11. *Factor Loadings Using Principal Components and Varimax Rotation for Empowerment Scale (Full-Factorial Experiment)*

<table>
<thead>
<tr>
<th>Statement</th>
<th>Autonomy &amp; Control</th>
<th>Sense of Influence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blogging can give me a sense of control over my life.</td>
<td>.88</td>
<td>.25</td>
</tr>
<tr>
<td>I feel blogging can enable me to know myself better.</td>
<td>.87</td>
<td>.25</td>
</tr>
<tr>
<td>Blogging can enable me to cope with my problems.</td>
<td>.85</td>
<td>.31</td>
</tr>
<tr>
<td>Blogging can give me a deeper sense of self-awareness.</td>
<td>.84</td>
<td>.34</td>
</tr>
<tr>
<td>Blogging can enable me to control some aspects of my life.</td>
<td>.83</td>
<td>.34</td>
</tr>
<tr>
<td>Blogging can make me feel more autonomous.</td>
<td>.75</td>
<td>.40</td>
</tr>
<tr>
<td>I feel that through blogging I can motivate other people to become more</td>
<td>.28</td>
<td>.87</td>
</tr>
<tr>
<td>involved in social issues.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I feel that through blogging I can motivate others to take action.</td>
<td>.28</td>
<td>.85</td>
</tr>
<tr>
<td>My blog can serve to provide information that can benefit others.</td>
<td>.28</td>
<td>.82</td>
</tr>
<tr>
<td>I feel that my blogging can influence the way other people think.</td>
<td>.30</td>
<td>.79</td>
</tr>
<tr>
<td>Blogging can enable me to share knowledge with others.</td>
<td>.34</td>
<td>.72</td>
</tr>
<tr>
<td>Blogging can enable me to meet similar others.</td>
<td>.37</td>
<td>.67</td>
</tr>
</tbody>
</table>

| Eigen Value | 7.67 | 1.50 |
| Proportion of Variance | 63.90 | 12.49 |
Table 12. Factor Loadings Using Principal Components and Varimax Rotation for Empowerment Scale (Journaling Experiment)

<table>
<thead>
<tr>
<th>Item</th>
<th>Autonomy &amp; Control</th>
<th>Sense of Influence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blogging/Writing in a diary can enable me to cope with my problems.</td>
<td>.91</td>
<td>.15</td>
</tr>
<tr>
<td>I feel blogging/writing in a diary can enable me to know myself better.</td>
<td>.91</td>
<td>.23</td>
</tr>
<tr>
<td>Blogging/Writing in a diary can give me a deeper sense of self-awareness.</td>
<td>.89</td>
<td>.20</td>
</tr>
<tr>
<td>Blogging/Writing in a diary can give me a sense of control over my life.</td>
<td>.87</td>
<td>.18</td>
</tr>
<tr>
<td>Blogging/Writing in a diary can enable me to control some aspects of my life.</td>
<td>.87</td>
<td>.22</td>
</tr>
<tr>
<td>Blogging/Writing in a diary can teach me things about myself I was not aware of before.</td>
<td>.83</td>
<td>.28</td>
</tr>
<tr>
<td>Blogging/Writing in a diary can serve as a form of therapy to me.</td>
<td>.81</td>
<td>.15</td>
</tr>
<tr>
<td>Blogging/Writing in a diary can make me feel more autonomous.</td>
<td>.74</td>
<td>.29</td>
</tr>
<tr>
<td>Blogging/Writing in a diary can make me feel more autonomous.</td>
<td>.74</td>
<td>.32</td>
</tr>
<tr>
<td>Blogs/Diaries can function as a support system for me.</td>
<td>.72</td>
<td>.38</td>
</tr>
<tr>
<td>Through blogging/diary-keeping, I can become more articulate with my thoughts.</td>
<td>.71</td>
<td>.39</td>
</tr>
<tr>
<td>I feel that through blogging/diary-keeping I can motivate others to take action.</td>
<td>.18</td>
<td>.89</td>
</tr>
<tr>
<td>I feel that through blogging/writing in a diary, I can motivate other people to become more involved in social issues.</td>
<td>.16</td>
<td>.88</td>
</tr>
<tr>
<td>My blog/diary can serve to provide information that can benefit others.</td>
<td>.26</td>
<td>.84</td>
</tr>
<tr>
<td>Writing in a blog/diary can enable me to meet similar others.</td>
<td>.19</td>
<td>.81</td>
</tr>
<tr>
<td>I feel that my writing in a blog/diary can influence the way other people think.</td>
<td>.23</td>
<td>.78</td>
</tr>
<tr>
<td>Writing in a blog/diary can enable me to share knowledge with others.</td>
<td>.19</td>
<td>.77</td>
</tr>
<tr>
<td>I feel that writing in a diary/blog can give me the right skills to bring about social change.</td>
<td>.36</td>
<td>.72</td>
</tr>
<tr>
<td>I expect to connect very well with my readers.</td>
<td>.36</td>
<td>.69</td>
</tr>
<tr>
<td><strong>Eigen Value</strong></td>
<td>10.87</td>
<td>3.00</td>
</tr>
<tr>
<td><strong>Proportion of Variance</strong></td>
<td>57.24</td>
<td>25.79</td>
</tr>
</tbody>
</table>
Table 13. Regression Analysis for the Relationship between Potential Intervening Variables and Sense of Influence

<table>
<thead>
<tr>
<th>Predictors</th>
<th>$\beta$</th>
<th>Zero-order correlations</th>
<th>Partial correlations</th>
<th>$t$</th>
</tr>
</thead>
<tbody>
<tr>
<td>SOC</td>
<td>.37</td>
<td>.71</td>
<td>.41</td>
<td>6.37***</td>
</tr>
<tr>
<td>SOA</td>
<td>.50</td>
<td>.75</td>
<td>.51</td>
<td>8.62***</td>
</tr>
</tbody>
</table>

Note: $F(2, 207) = 180.87$, $p < .001$, adjusted $R^2 = .63$. Beta coefficients are standardized.

***$p < .001$
Table 14. Summary of Regression Analyses for the Relationship between Potential Intervening Variables and Psychological Empowerment

<table>
<thead>
<tr>
<th>Dependent Variables</th>
<th>Predictors</th>
<th>β</th>
<th>Zero-order correlations</th>
<th>Partial correlations</th>
<th>t</th>
</tr>
</thead>
<tbody>
<tr>
<td>Autonomy &amp; Control</td>
<td>SOC</td>
<td>-.04</td>
<td>.40</td>
<td>-.06</td>
<td>-.71</td>
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<tr>
<td></td>
<td>SOA</td>
<td>.86</td>
<td>.84</td>
<td>.81</td>
<td>15.45***</td>
</tr>
<tr>
<td>Sense of Influence</td>
<td>SOC</td>
<td>.56</td>
<td>.73</td>
<td>.62</td>
<td>8.86***</td>
</tr>
<tr>
<td></td>
<td>SOA</td>
<td>.34</td>
<td>.62</td>
<td>.43</td>
<td>5.33***</td>
</tr>
</tbody>
</table>

Note: Beta coefficients are standardized.

***p < .001
Appendix B
Survey Study Measures
BLOG SURVEY

PART ONE
BLOGGING EXPERIENCE

Please indicate the degree to which each of the following statements characterizes your blogging activity (1 – “Not At All,” 5 – “Somewhat,” 9 – “A Lot”):

1. I blog about social issues.
   1 2 3 4 5 6 7 8 9

2. I blog about political issues.
   1 2 3 4 5 6 7 8 9

3. I blog about scientific issues.
   1 2 3 4 5 6 7 8 9

4. I blog about personal issues.
   1 2 3 4 5 6 7 8 9

5. I include links to content from outside sources (e.g., articles) in my blog.
   1 2 3 4 5 6 7 8 9

6. I only include links to outside sources of information when they are relevant to my personal stories.
   1 2 3 4 5 6 7 8 9

7. I blog about personal experiences.
   Not At All  Somewhat  A Lot
   1 2 3 4 5 6 7 8 9
8. I think my blog is interactive.

9. How long have you been blogging for? _______ Years _______ Months

10. How often do you update your blog?
   - Every Day
   - Every Other Day
   - Once Every 3 Days
   - Once a Week
   - Every Other Week
   - Once Every 3 Weeks
   - Every a Month
   - Every Other Month
   - A Few Times a Year
   - Less than Once a Year

11. How many other blogs do you follow regularly _______ blogs

12. How often do you browse other blogs?
   - Every Day
   - Every Other Day
   - Once Every 3 Days
   - Once a Week
   - Every Other Week
   - Once Every 3 Weeks
   - Every a Month
   - Every Other Month
   - A Few Times a Year
   - Less than Once a Year

13. How many other blogs do you link to from your blog (i.e., blogroll size)?
    _______ blogs

14. How often do you post comments on other blogs?
   - Every Day
   - Every Other Day
   - Once Every 3 Days
   - Once a Week
   - Every Other Week
   - Once Every 3 Weeks
   - Every a Month
   - Every Other Month
   - A Few Times a Year
   - Less than Once a Year

15. How many comments would you say your blog receives per post, generally?
    _______ comments / post.
16. How would you rate the number of comments your blog receives per post, generally?

Very Few  1  2  3  4  5  6  7  8  9
Moderate   A Lot

17. How many visitors would you say your blog receives per day, generally? 
_______ site visits / day.

18. How would you rate the number of site visits your blog receives per day, generally?

Very Few  1  2  3  4  5  6  7  8  9
Moderate   A Lot

PART TWO
MOTIVATIONS FOR BLOGGING

Please take a minute to think about your motivations for blogging, the reasons why you started to blog in the first place, and the reasons why you continue to blog to this day. Then, indicate the degree to which each of the following statements characterizes your REASONS for blogging (1 – “Not At All,” 5 – “Somewhat,” 9 – “A Lot”):

1. I blog to document my life.
   1  2  3  4  5  6  7  8  9

2. I blog because I want to get to know people with similar values.
   1  2  3  4  5  6  7  8  9

3. I blog to explore aspects of my identity.
   1  2  3  4  5  6  7  8  9

4. I blog because I want to bring about social change
   1  2  3  4  5  6  7  8  9
5. I blog to connect with similar others.

6. I blog to keep track of my experiences.

7. I blog to meet people.

8. I blog because I want to express my own voice.

9. I blog to cope with my problems.

10. I blog to network.

11. I blog to get to know myself better.

12. I blog to provide support to others.

13. I blog because I want to influence the way other people think.

14. I blog to communicate with others.
15. I blog for pure entertainment.

16. I blog to create a stronger sense of self.

17. I blog because I want to make this a better world.

18. I blog to provide information to other people.

19. I blog to convince others.

20. I blog to assert myself.

21. I blog because I want to interact with similar others through my blog.

22. I blog to remember other people.

23. I blog to explore hidden aspects of my personality.
24. I blog to earn money.

25. I blog to vent about my own problems.

26. I blog because I want my ideas to be known to others.

27. I blog to acknowledge/commemorate other people.

28. I blog because I want to develop new friendships.

29. I blog because I want to feel accepted.

30. I blog because I want to change the world.

31. I blog because I'm bored.

32. I blog because I want to know people with similar interests.
33. I blog because I want to belong.

1 2 3 4 5 6 7 8 9

34. I blog to kill my time.

1 2 3 4 5 6 7 8 9

35. I blog to celebrate others.

1 2 3 4 5 6 7 8 9

36. I blog because I have things to say to the world.

1 2 3 4 5 6 7 8 9

37. I blog to educate others.

1 2 3 4 5 6 7 8 9

38. I blog to receive support from others.

1 2 3 4 5 6 7 8 9

PART THREE
BLOGGING OUTCOMES

Now that you've indicated your reasons for blogging, put them aside and try to think of the outcomes of blogging, i.e., what blogging actually does/has done for you! Then, indicate the degree to which each of the following statements characterizes the perceived OUTCOMES and EFFECTS of your blogging, as best as you can tell (1 – “Not At All,” 5 – “Somewhat,” 9 – “A Lot”):

1. Blogs function as a support system for me.

1 2 3 4 5 6 7 8 9

2. Blogging enables me to meet similar others.

1 2 3 4 5 6 7 8 9
3. Blogging enables me to share knowledge with others.

1 2 3 4 5 6 7 8 9

4. Blogging makes me feel part of a larger community.

1 2 3 4 5 6 7 8 9

5. I feel that I connect very well with my readers.

1 2 3 4 5 6 7 8 9

6. Blogging serves as a form of group therapy to me.

1 2 3 4 5 6 7 8 9

7. Blogging has forced me to pay more attention to my thoughts.

1 2 3 4 5 6 7 8 9

8. My blog serves to provide information that can benefit others.

1 2 3 4 5 6 7 8 9

9. Through blogging, I have become a better critical thinker.

1 2 3 4 5 6 7 8 9

10. I feel that my blogging can influence the way other people think.

1 2 3 4 5 6 7 8 9

11. I feel that through blogging, I can motivate other people to become more involved in social issues.

1 2 3 4 5 6 7 8 9
12. I feel that through blogging I can motivate others to take action.

1 2 3 4 5 6 7 8 9

13. Blogging makes me feel I have control over my own voice.

1 2 3 4 5 6 7 8 9

14. Blogging enables me to assert myself.

1 2 3 4 5 6 7 8 9

15. Blogging makes me feel I have a distinct voice.

1 2 3 4 5 6 7 8 9

16. Blogging gives me a sense of control over my life.

1 2 3 4 5 6 7 8 9

17. Blogging makes me feel more autonomous.

1 2 3 4 5 6 7 8 9


1 2 3 4 5 6 7 8 9

19. I feel blogging enables me to know myself better.

1 2 3 4 5 6 7 8 9

20. Blogging has taught me things about myself I was not aware of before.

1 2 3 4 5 6 7 8 9
21. Blogging enables me to cope with my problems.

22. Blogging enables me to control some aspects of my life.

23. I feel blogging has sharpened my thinking skills.

24. I feel that I connect very well with other bloggers.

25. I feel that blogging gives me the right skills to bring about social change.

26. Through blogging, I have become more articulate with my thoughts.

27. A space that allows others to participate, like blogs, is a good place for me to be in.

28. People who comment on this blog do not all share the same values.

29. My readers and I want the same thing from participating in this blog.
30. I can recognize the names of most people who comment on this blog.

1 2 3 4 5 6 7 8 9

31. I feel at home in this blog.

1 2 3 4 5 6 7 8 9

32. Very few people who follow this blog know me personally.

1 2 3 4 5 6 7 8 9

33. I care about what readers think of my views and actions.

1 2 3 4 5 6 7 8 9

34. I have no influence over what my readers are like.

1 2 3 4 5 6 7 8 9

35. If there is a problem raised in this blog, there are readers who can solve it.

1 2 3 4 5 6 7 8 9

36. It is very important to me to interact with others through this blog.

1 2 3 4 5 6 7 8 9

37. People who comment on this blog generally don't get along with each other.

1 2 3 4 5 6 7 8 9

38. I expect to have this blog for a long time.

1 2 3 4 5 6 7 8 9
39. I can anticipate how some readers will react to certain issues raised in this blog.

   1 2 3 4 5 6 7 8 9

40. I get a lot out of interacting with others through this blog.

   1 2 3 4 5 6 7 8 9

41. I have raised questions in this blog that have been answered by readers.

   1 2 3 4 5 6 7 8 9

42. I have gotten support from those following my blog.

   1 2 3 4 5 6 7 8 9

43. Some of the followers of this blog are friends with each other.

   1 2 3 4 5 6 7 8 9

44. I have friends among those who follow my blog.

   1 2 3 4 5 6 7 8 9

45. Some people who follow this blog can be counted on to help others.

   1 2 3 4 5 6 7 8 9

46. I feel obligated to help others through my blog.

   1 2 3 4 5 6 7 8 9

47. I like my blog audience.

   1 2 3 4 5 6 7 8 9
48. My blog audience means a lot to me.

Finally, please answer the following questions as accurately as you can, your responses will be CONFIDENTIAL:

1. What is your gender?
   Male
   Female

2. What is your age? _______ years

3. What is your ethnicity?
   Caucasian
   African American
   Asian American
   Hispanic
   Native American
   Pacific Islander
   Other
   Multiracial

4. What is the highest level of education you have attained?
   Less than High School
   High School
   College
   Graduate School
   Post-Graduate School
Appendix C
Experiment Measures (Blogging Study)
BLOG USABILITY AND POPULARITY STUDY

PART ONE
ATTITUDES TOWARD BLOGGING

Based on your two-day blogging experience, please indicate the degree to which you agree with the following statements (1 – “Not At All,” 5 – “Somewhat,” 9 – “A Lot”):

1. I enjoyed blogging.
   1 2 3 4 5 6 7 8 9

2. In this study, I blogged about an issue that is dear to my heart.
   1 2 3 4 5 6 7 8 9

3. I am interested in blogging.
   1 2 3 4 5 6 7 8 9

4. I found it easy to create a blog.
   1 2 3 4 5 6 7 8 9

5. I think I will continue blogging after the study is over.
   1 2 3 4 5 6 7 8 9

6. I am very curious about blogging.
   1 2 3 4 5 6 7 8 9

7. I found it easy to blog.
   1 2 3 4 5 6 7 8 9
8. I would like to know more about blogging.

9. I found blogging to be exciting.

10. The blog entry that I posted for the study deals with an issue that is very important to me.

Please answer the following questions pertaining to the feedback it received:

11. How many comments did your blog post receive?
   Day 1 _________ comments
   Day 2 _________ comments

12. How would you rate the number of comments your blog received on average in these 2 days?

   Very Few  Moderate  A Lot
   1 2 3 4 5 6 7 8 9

13. How many site visits did your blog receive?
   Day 1 _________ site visits
   Day 2 _________ site visits

14. How would you rate the number of site visits your blog received on average in these 2 days?

   Very Few  Moderate  A Lot
   1 2 3 4 5 6 7 8 9
Now please answer the following questions thinking about your overall experience with blogs:

15. Have you ever read a blog before this study?

Never  
Every Day  
Every Other Day  
Once Every 3 Days  
Once a Week  
Every Other Week  
Once Every 3 Weeks  
Once a Month  
Every Other Month  
A Few Times a Year  
Less than Once a Year

16. Have you ever commented on a blog before this study?

Never  
Every Day  
Every Other Day  
Once Every 3 Days  
Once a Week  
Every Other Week  
Once Every 3 Weeks  
Once a Month  
Every Other Month  
A Few Times a Year  
Less than Once a Year

17. Have you ever blogged before this study?

Never  
Every Day  
Every Other Day  
Once Every 3 Days  
Once a Week  
Every Other Week  
Once Every 3 Weeks  
Once a Month  
Every Other Month  
A Few Times a Year  
Less than Once a Year

PART TWO
BLOGGING OUTCOMES

Based on your experience with blogging in the past couple of days, if you were to continue blogging, what would be your views on the perceived OUTCOMES and EFFECTS of your blogging, as best as you can tell (1 – “Not At All,” 5 – “Somewhat,” 9 – “A Lot”):

1. Blogs can function as a support system for me.

1 2 3 4 5 6 7 8 9

2. Blogging can enable me to meet similar others.

1 2 3 4 5 6 7 8 9
3. Blogging can enable me to share knowledge with others.

4. Blogging can make me feel part of a larger community.

5. I expect to connect very well with my readers.

6. Blogging can serve as a form of group therapy to me.

7. Blogging can force me to pay more attention to my thoughts.

8. My blog can serve to provide information that can benefit others.

9. Through blogging, I can become a better critical thinker.

10. I feel that my blogging can influence the way other people think.

11. I feel that through blogging, I can motivate other people to become more involved in social issues.
12. I feel that through blogging I can motivate others to take action. 

1 2 3 4 5 6 7 8 9

13. Blogging can make me feel I have control over my own voice. 

1 2 3 4 5 6 7 8 9

14. Blogging can enable me to assert myself. 

1 2 3 4 5 6 7 8 9

15. Blogging can make me feel I have a distinct voice. 

1 2 3 4 5 6 7 8 9

16. Blogging can give me a sense of control over my life. 

1 2 3 4 5 6 7 8 9

17. Blogging can make me feel more autonomous. 

1 2 3 4 5 6 7 8 9

18. Blogging can give me a deeper sense of self-awareness. 

1 2 3 4 5 6 7 8 9

19. I feel blogging can enable me to know myself better. 

1 2 3 4 5 6 7 8 9

20. Blogging can teach me things about myself I was not aware of before. 

1 2 3 4 5 6 7 8 9
21. Blogging can enable me to cope with my problems.

22. Blogging can enable me to control some aspects of my life.

23. I feel blogging can sharpen my thinking skills.

24. I expect to connect very well with other bloggers.

25. I feel that blogging can give me the right skills to bring about social change.

26. Through blogging, I can become more articulate with my thoughts.

PART THREE
PERCEPTIONS OF BLOG INTERACTIONS

Based on your experience with blogging in the past couple of days, if you were to continue blogging, what would you think about the INTERACTIONS YOU WOULD HAVE THROUGH YOUR BLOG? (1 – “Not At All,” 5 – “Somewhat,” 9 – “A Lot”):

1. A space that allows others to participate, like blogs, is a good place for me to be in.

1 2 3 4 5 6 7 8 9
2. I expect that people commenting on this blog will not all share the same values.

3. I expect that my readers and I want the same thing from participating in this blog.

4. Over time, I will be able to recognize the names of most people who comment on this blog.

5. I feel at home in this blog.

6. Over time, very few people who follow this blog will know me personally.

7. I care about what readers think of my views and actions.

8. I don't expect to have any influence over what my readers are like.

9. If there is a problem raised in this blog, I expect there will be readers who can solve it.
10. It may well become very important to me to interact with others through this blog.

11. I expect that people commenting on this blog generally won't get along with each other.

12. I expect to have this blog for a long time.

13. Over time, I will be able to anticipate how some readers will react to certain issues raised in this blog.

14. I expect to get a lot out of interacting with others through this blog.

15. I expect that if I raise questions in this blog they will be answered by readers.

16. I expect to support from those following my blog.

17. I expect that some of the followers of this blog will be friends with each other.

18. I expect to have friends among those who follow my blog.
19. I expect that some people who follow this blog can be counted on to help others.

1 2 3 4 5 6 7 8 9

20. I might feel obligated to help others through my blog.

1 2 3 4 5 6 7 8 9

21. I think I will like my blog audience.

1 2 3 4 5 6 7 8 9

22. I feel my blog audience will mean a lot to me.

1 2 3 4 5 6 7 8 9

Finally, please answer the following questions as accurately as you can, your responses will be CONFIDENTIAL:

1. What is your gender?
   Male
   Female

2. What is your age? ________ years

3. What is your ethnicity?
   Caucasian
   African American
   Asian American
   Hispanic
   Native American
   Pacific Islander
   Other

4. What is the highest level of education you have attained?
   Less than High School
   High School
   College
   Graduate School
   Post-Graduate School
Appendix D
Experiment Measures (Journaling Study)
WRITING STUDY

PART ONE
ATTITUDES TOWARD DIARY-WRITING

Please indicate the degree to which you agree with the following statements (1 – “Not At All,” 5 – “Somewhat,” 9 – “A Lot”):

1. I enjoyed writing.
   
   1 2 3 4 5 6 7 8 9

2. In this study, I wrote about an issue that is dear to my heart.
   
   1 2 3 4 5 6 7 8 9

3. I am interested in diary-keeping.
   
   1 2 3 4 5 6 7 8 9

4. I found it easy to write.
   
   1 2 3 4 5 6 7 8 9

5. I think I will continue writing after the study is over.
   
   1 2 3 4 5 6 7 8 9

6. I am very into diary-keeping.
   
   1 2 3 4 5 6 7 8 9

7. I found it easy to put my thoughts and feelings down.
   
   1 2 3 4 5 6 7 8 9
8. I would like to write more.

   1 2 3 4 5 6 7 8 9

9. I found writing to be exciting.

   1 2 3 4 5 6 7 8 9

10. The 1-pager I wrote for the study deals with an issue that is very important to me.

   1 2 3 4 5 6 7 8 9

11. How often did you write in a diary in the past few years?

   Never   Once Every 3 Weeks
   Every Day Once a Month
   Every Other Day Every Other Month
   Once Every 3 Days A Few Times a Year
   Once a Week Less than Once a Year
   Every Other Week

PART TWO
WRITING OUTCOMES

If you were to continue writing in a diary, what would be your views on the perceived OUTCOMES and EFFECTS of your diary-keeping, as best as you can tell (1 – “Not At All,” 5 – “Somewhat,” 9 – “A Lot”):

1. Diaries can function as a support system for me.

   1 2 3 4 5 6 7 8 9

2. Writing in a diary can enable me to meet similar others.

   1 2 3 4 5 6 7 8 9

3. Writing in a diary can enable me to share knowledge with others.

   1 2 3 4 5 6 7 8 9
4. Writing in a diary can make me feel part of a larger community.

5. I expect to connect very well with my readers.

6. Writing in a diary can serve as a form of therapy to me.

7. Writing in a diary can force me to pay more attention to my thoughts.

8. My diary can serve to provide information that can benefit others.

9. Through diary-keeping, I can become a better critical thinker.

10. I feel that my writing in a diary can influence the way other people think.

11. I feel that through writing in a diary, I can motivate other people to become more involved in social issues.

12. I feel that through diary-keeping I can motivate others to take action.
13. Writing in a diary can make me feel I have control over my own voice.

1 2 3 4 5 6 7 8 9

14. Writing in a diary can enable me to assert myself.

1 2 3 4 5 6 7 8 9

15. Writing in a diary can make me feel I have a distinct voice.

1 2 3 4 5 6 7 8 9

16. Writing in a diary can give me a sense of control over my life.

1 2 3 4 5 6 7 8 9

17. Writing in a diary can make me feel more autonomous.

1 2 3 4 5 6 7 8 9

18. Writing in a diary can give me a deeper sense of self-awareness.

1 2 3 4 5 6 7 8 9

19. I feel writing in a diary can enable me to know myself better.

1 2 3 4 5 6 7 8 9

20. Writing in a diary can teach me things about myself I was not aware of before.

1 2 3 4 5 6 7 8 9

21. Writing in a diary can enable me to cope with my problems.

1 2 3 4 5 6 7 8 9
22. Writing in a diary can enable me to control some aspects of my life.

23. I feel writing in a diary can sharpen my thinking skills.

24. I expect to connect very well with other people as a result of diary-keeping.

25. I feel that writing in a diary can give me the right skills to bring about social change.

26. Through diary-keeping, I can become more articulate with my thoughts.

Finally, please answer the following questions as accurately as you can, your responses will be CONFIDENTIAL:

1. What is your gender?
   Male
   Female

2. What is your age? _______ years

3. What is your ethnicity?
   Caucasian
   African American
   Asian American
   Hispanic
   Native American
   Pacific Islander
   Other
   Multiracial

4. What is the highest level of education you have attained?
   Less than High School
   High School
   College
   Graduate School
   Post-Graduate School
Appendix E
Experiment Instructions (Blogging Study)

BLOG USABILITY AND POPULARITY STUDY
STUDY TASKS CHECKLIST

DAY 1 (_______)

______ Create blog (by 11:30 AM)
______ Write one blog entry (by 11:30 AM)
______ Send blog url to cds205@psu.edu (by 11:30 AM)
______ Check blog stats (at 7:30 PM)

  Number of comments: ………
  Number of site visits: ………

DAY 2 (_______)

______ Check blog stats (at 7:30 PM)

  Number of comments: ………
  Number of site visits: ………

______ Fill out online questionnaire (at 7:30 PM)

  (this will be e-mailed to you no later than 5:30 PM!)
STUDY PROTOCOL

Welcome to the Blogging Usability and Popularity Study! This study looks at how easy currently available free blogging softwares are to use, as well as how long it takes for newly created blogs to start circulating in the blogosphere.

Given the purpose of our study, it is **very important** that you do **NOT** let your friends, classmates, family, etc. know about your blog during the 2 study days.

Before you begin any of the study tasks, **please read this page carefully!**

---

**DAY 1 – ______**

**TASK 1 ➔ CREATE A BLOG**

Create a blog (see Part I of the Study Instructions, p. 3). **Deadline: 11:30 AM**

**TASK 2 ➔ WRITE A BLOG ENTRY**

Write a blog entry (see Part II of the Study Instructions, p. 8) focusing on anything that has to do with your life – innermost feelings, personal experiences, personal issues, relationships, health, etc. (~ **100 words**). **Deadline: 11:30 AM**

**TASK 3 ➔ SEND BLOG URL TO cds205@psu.edu**

Next, please send your blog’s url (username.wordpress.com) to Carmen Stavrositu at cds205@psu.edu. **Deadline: 11:30 AM**

**TASK 4 ➔ CHECK BLOG STATS**

Check blog stats (see Part III of the Study Instructions, p. 9). Check the number of comments and site visits your blog has received by 7:30 PM & note these on the study checklist (on average, blogs receive 2-3 comments and 25-30 site visits per day). **Deadline: 7:30 PM**

---

**DAY 2 – ______**

**TASK 1 ➔ CHECK BLOG STATS**

Check blog stats again, as you did the first day (see Part III - Study Instructions, p. 9). **Deadline: 7:30 PM**

**TASK 2 ➔ FILL OUT ONLINE QUESTIONNAIRE**

Finally, you will receive an email (at 5:00 PM) directing you to the online questionnaire that will complete the study. Please fill out this questionnaire **by 7:30 PM**. Thank you!
PART I. CREATING A BLOG

1. Go to http://wordpress.com/
2. Click on “Start your WordPress Blog”

3. Enter a username OF YOUR CHOICE (I entered mine as “studytrial”).
4. Enter an email address you check regularly.
5. In “Legal Flotsam” check the terms of service box and “Gimme a blog!”
6. “Blog Domain”: this is the URL of your blog. Make a note of it
7. “Blog Title”: enter a name for your blog – it can be ANYTHING you want!
8. “Privacy”: uncheck the box associated with it, then press “Signup”

9. Immediately, you will be sent an email to the address you gave, so check it and press on the link provided to activate your blog (It is possible that this email ends up in your junk folder depending on your junk filter, so please check there if need be!).

10. Next, you’ll be directed to a screen displaying your username and password. Make a note of those HERE ______________/____________ and then click “Login.”
11. Enter your username and password provided, then click “Login” again.

12. Once you do, you will be led to your blog’s main page. Next, click on “Dashboard” at the top of the page on the left-hand side.
13. Once you get to your Dashboard, select the “Options” tab (1st line of tabs), followed by the “Discussion” one (2nd line of tabs), and make sure to uncheck:
 o “Anyone posts a comment”
 o “Comment author must fill out name and e-mail”
 o “Comment author must have a previously approved comment”

14. Next, click on “Dashboard” (on both lines of tabs) again, and click on “Edit” next to “New Post” (this is to delete the default post provided by WordPress).
15. On the next screen, scroll down until you see the “Delete this post” button. Click on it!
PART II. WRITING IN A BLOG

16. You are now ready write your blog entry. Remember, your entry should focus on anything that has to do with your life – innermost feelings, personal experiences, personal issues, relationships, health, etc!

First, type in a title in the “Title” box, then your entry in the body, then “Publish”!

17. To be able to see your post, click on “View site” at the top left of the page.

!!! Please send your blog url (username.wordpress.com) to cds205@psu.edu from your PSU email account NOW!!!

TASKS (1) AND (2) COMPLETE! THANK YOU!

☐ You are now done with your first two tasks, you may logout from WordPress!

☐ Next, you will need to monitor responses to your blog entry:
  o once this evening (7:30 p.m.) and
  o once again tomorrow evening (7:30 p.m.)
PART III. CHECKING BLOG STATS

18. Your third task consists of checking the comments and visits your blog may have received. For this, you need to log on again by first going to http://wordpress.com/. Then enter your username and ID, then click “Login.”

19. Click on your blog’s name.
20. Once you do, you will see a page displaying your dashboard. Click on the “Blog Stats” tab.

21. Scroll all the way down, where you will see the Blog Stats box. You need to pay attention to “Views today” to see how many times your blog has been viewed that day, and “Comments” to see how many comments you’ve received.

Remember, the average number of comments a blog receives is 2-3/day, while the typical number of site visits is 25-30/day!
22. If you have comments, you can read them by first clicking on “View Site” at the very top of the page.

23. Finally, on the next page, click “Comments” below your post! Upon clicking you will see a list of the comments your entry received from readers!
1 This document represents the study instructions for the personal blog condition. In the filter blog condition, task 2 was phrased as follows: “Write a blog entry (see Part II of the Study Instructions, p. 8) focusing on topics/issues that are important to you – e.g., politics, social issues, science, feminism, international policy, economy, racism, etc. (~100 words).”
CURRICULUM VITAE
Carmen Stavrositu

EDUCATION

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<th>Field</th>
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<td>2007</td>
<td>Ph.D.</td>
<td>Mass Communication</td>
<td>The Pennsylvania State University</td>
<td>University Park, PA, USA</td>
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<td>2003</td>
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<td>Media Studies</td>
<td>The Pennsylvania State University</td>
<td>University Park, PA, USA</td>
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<td>University of Bucharest</td>
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RESEARCH & TEACHING INTERESTS

- Psychological Aspects of New Media
- Media Effects
- Communication Theory
- Communication Research Methods

TEACHING EXPERIENCE

Summer 2005 – Spring 2007, Pennsylvania State University
Media and the Public, COMM 413
Research Methods for Advertising and Public Relations, COMM 420
Introduction to Mass Communication Research, COMM 404

PROFESSIONAL AFFILIATIONS

- Association for Education in Journalism and Mass Communication (AEJMC)
- Broadcast Education Association (BEA)
- International Communication Association (ICA)
- National Communication Association (NCA)