ABSTRACT

BRINSON, NANCY HOWELL. Perceived Privacy Violation as a Predictor of Receptiveness to Personalized Online Advertising. (Under the direction of Ryan Hurley.)

Marketers increasingly seek to segment audiences into tailored clusters utilizing big data in the form of audience demographics, geographic location, and previous shopping behaviors in an effort to secure their interest and satisfy their needs. While trumpeting their ability to create experiences that reflect individual preferences, marketers have largely failed to understand the delicate balance between personalized messages that recipients welcome and those that daze, dismay, or disturb them. As reported in the Truth About Privacy study (McCann, 2013), U.S. consumer attitudes related to data sharing and advertising personalization have shifted significantly over the past two years, particularly within contexts considered to be more private (such as health, financial and legal matters). For communication scholars and practitioners, this recent attitudinal shift indicates a critical need to better understand the implications of personalized communication in a variety of contexts. The present study explores the relationship between perceived privacy violation and the level of personalization in advertising messages with a goal of advancing research and practice in a number of ways. First, contrasting theories from mass communication (uses and gratifications theory) and interpersonal communication (expectancy violations theory) encourages scholars to consider an interdisciplinary theoretical framework that more accurately reflects the dynamics associated with computer-mediated communication (CMC). Secondly, an increased understanding of consumers’ perceptions about personalized advertising in a variety of forms and contexts will enable communication practitioners to better understand and address consumer interests and needs.
Perceived Privacy Violation as a Predictor of Receptiveness to Personalized Online Advertising

by
Nancy Howell Brinson

A thesis submitted to the Graduate Faculty of North Carolina State University in partial fulfillment of the requirements for the degree of Master of Science

Communication

Raleigh, North Carolina
2014

APPROVED BY:

Deanna Dannels
Ryan Hurley
Chair of Advisory Committee

Stephen Wiley
DEDICATION

I dedicate this thesis to my mentors, teachers, friends and family who encouraged me to never give up.
BIOGRAPHY

During her 25-year advertising career, Nancy Howell Brinson has had the good fortune to work with some of the most talented advertising professionals of her generation. The experiences she had at DDB, Tracy Locke, Chiat/Day and Ogilvy & Mather developed her interest in personalized media communication, which led to her enrollment in the Master of Science in Communication program at North Carolina State University in the fall of 2010. Her graduate school research has focused on understanding how the delivery of increasingly personalized advertising messages impacts audience perceptions and avoidance behavior.

Ms. Brinson was offered a Park Fellowship at the University of North Carolina at Chapel Hill, and will continue her studies as a Ph.D. student beginning in August 2014.
ACKNOWLEDGMENTS

This thesis would not be possible without the support of my dedicated committee members, as well as the many colleagues and friends who contributed each in their own way.
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Pages</th>
</tr>
</thead>
<tbody>
<tr>
<td>LIST OF TABLES</td>
<td>vi</td>
</tr>
<tr>
<td>LIST OF FIGURES</td>
<td>vii</td>
</tr>
<tr>
<td>INTRODUCTION</td>
<td>1</td>
</tr>
<tr>
<td>1.1 Personalized Advertising</td>
<td>3</td>
</tr>
<tr>
<td>1.2 Uses and Gratifications Theory</td>
<td>6</td>
</tr>
<tr>
<td>1.3 Expectancy Violations Theory</td>
<td>8</td>
</tr>
<tr>
<td>1.4 Research Questions and Hypotheses</td>
<td>10</td>
</tr>
<tr>
<td>METHOD</td>
<td>11</td>
</tr>
<tr>
<td>2.1 Procedures</td>
<td>11</td>
</tr>
<tr>
<td>2.2 Participants</td>
<td>12</td>
</tr>
<tr>
<td>2.3 Measures</td>
<td>13</td>
</tr>
<tr>
<td>RESULTS</td>
<td>14</td>
</tr>
<tr>
<td>3.1 Qualitative Data Analysis</td>
<td>14</td>
</tr>
<tr>
<td>3.2 Quantitative Data Analysis</td>
<td>19</td>
</tr>
<tr>
<td>DISCUSSION</td>
<td>20</td>
</tr>
<tr>
<td>LIMITATIONS AND FUTURE DIRECTIONS</td>
<td>24</td>
</tr>
<tr>
<td>CONCLUSIONS</td>
<td>26</td>
</tr>
<tr>
<td>REFERENCES</td>
<td>28</td>
</tr>
<tr>
<td>APPENDIX</td>
<td>33</td>
</tr>
</tbody>
</table>
LIST OF TABLES

Table A.1 Perceived Privacy Violation of Personalized Advertising Sorted by Relationship to Sender ........................................................................................................................................... 34

Table A.2 Perceived Privacy Violation of Personalized Advertising Sorted by Delivery Channel ........................................................................................................................................... 35
LIST OF FIGURES

Figure A.1  Coding Taxonomy for Context About Which Respondents Reported Receiving Personalized Advertising Messages .................................................. 36

Figure A.2  Characteristics of Personalized Advertising Considered “Helpful” or “Uncomfortable” ................................................................. 37
INTRODUCTION

Today’s consumers are being inundated with a barrage of personalized advertising messages. According to a recent study by the Economist Intelligence Unit (2013), consumers believe the volume of personalized advertising messages they receive has increased over the past five years, with 33% of them expressing negative opinions about this practice. The 2013 Internet Advertising Revenue Report reveals that these perceptions are well founded, as online advertising revenues in the United States hit an historic high of $20.1 billion for the first six months of 2013. This figure represents an 18% increase over the same period in 2012 and follows a trend of double-digit growth recorded nearly every year since the Internet Advertising Bureau (IAB) began tracking online advertising spending in 2002.

Marketers increasingly seek to segment audiences into tailored clusters utilizing “big data” in the form of audience demographics, geographic location, and previous shopping behaviors in an effort to secure their interest and satisfy their needs (Vesanen & Raulas, 2006). Advancing technologies have expanded personalization capabilities to every imaginable venue including customized magazine covers featuring a photograph of each subscriber’s home (Carr, 2004), personalized e-mail messages addressing private information about the recipient (White, Zarhay, Thorbjornsen, & Shavitt, 2008), as well as search engine and website banner advertising tailored to an individual’s specific online behaviors and preferences (Zhang & Wedel, 2009).

Although marketers trumpet their ability to create experiences that reflect individual preferences, they have largely failed to understand the delicate balance between personalized
messages that recipients welcome, and those that daze, dismay, or disturb them. Recent IAB (2013) data indicates that click through rates (CTRs) for online banner advertising have dropped 20 to 30% since 2010. Advertising industry leaders concerned about the factors contributing to this downturn commissioned studies to examine the motivations behind this (lack of) response. As reported by the Truth About Privacy study (McCann, 2013), U.S. consumer attitudes related to data sharing and advertising personalization have shifted significantly within the past two years, particularly within contexts that they consider to be more private (such as healthcare, personal relationships, financial and legal matters). Moreover, 39% of the respondents expressed concern about information tracking related to their online behaviors, and 21% indicated they are “very concerned” about the privacy of information contained in e-mail communications from vendors.

For communication scholars and practitioners, this recent attitudinal shift indicates a critical need to better understand consumer perceptions related to personalized communication. Ignoring or avoiding personalized messages intended to inform or persuade them has potentially negative implications not only for consumers, but also for public policy, education, health care, and public safety advocates. To address this need, the present study utilized a mixed methods survey to examine the circumstances by which personalized advertising is either positively or negatively perceived by consumers. Analysis of open-ended questions about “helpful” or “uncomfortable” personalized advertising provides important insights about the context as well as the characteristics of such messaging. Further, measuring responses to specific personalized advertising messages in a variety of contexts
suggests implications related to the channel by which personalized messages are sent, as well as message receptivity based on the previous interactions between the sender and receiver.

Exploring the relationship between perceived privacy violation and the level of personalization in advertising messages offers to advance research and practice in a number of ways. First, contrasting theories from mass communication (uses and gratifications) and interpersonal communication (expectancy violations theory) encourages scholars to consider an interdisciplinary theoretical framework that more accurately reflects the dynamics associated with computer-mediated communication (CMC). Secondly, an increased understanding of consumers’ perceptions about personalized messaging in a variety of forms and contexts will enable communication practitioners to better understand consumer needs and improve their personalized communication outcomes.

1.1 Personalized Advertising

Until recently, very little scholarly attention has focused on personalized mass-mediated communication. Consequently, there is some disagreement about the definition of personalized advertising. Most contemporary scholars agree it must involve tailoring a message and/or delivery channel to each consumer while retaining principles of mass message production (Goldsmith & Jordan, 2004; Morimoto & Chang, 2006; Zhang & Wedel, 2009). In their recent study on personalized advertising avoidance, Baek and Morimoto (2012) defined personalized advertising as “a form of customized promotional messaging that is delivered to each individual consumer through paid media based on personal information, such as consumers’ names, past buying history, demographics, psychographics,
locations, and lifestyle interests” (p. 59). A key point of difference between modern message personalization and what was possible just a few years ago is the development of advanced information-processing technologies that target messaging based on a consumer’s recent online behaviors in addition to these other factors. These new technologies are allowing marketers to implement an expanding array of personalization strategies to target their messaging based on presumed consumer interest and needs (Raulas, 2006; Vesanen, 2007).

Personalized messages that play to specific consumer behaviors are considered effective tactics for online marketers across a number of industries, from consumer goods and services to non-profit organizations (Interactive Advertising Bureau, 2013). The purported advantage to consumers is that this technology enables them to more quickly locate relevant messages based on their needs and preferences, minimizing the time they spend searching through information to find precisely what they want (Srinivasan, Anderson & Ponnavolu, 2002). For marketers, personalized communication has proven to be significantly more cost effective in comparison to traditional mass media advertising because it has the potential to distribute highly tailored commercial messages to individual consumers who have been identified as viable prospects (Kim, Lee, Shaw, Chang & Nelson, 2001).

Although asserting that modern forms of personalized advertising provide benefits to both consumers and marketers, scholars acknowledge evidence that some forms of personalized messaging are considered unwelcome. A recent Pew Internet & American Life study found that many consumers are anxious about the collection of personal information by search engines and other websites, with 68% reporting an unfavorable view of personalized
advertising (Purcell, Brenner & Rainie, 2012). Likewise, Callius (2008) found that 22% of respondents reported avoiding all forms of personalized advertising. This reaction is well supported by industry data showing consumers are increasingly turning to technologies that allow them to block online ads (Mozilla, 2013), avoid unwanted e-mails (Callius, 2008) and register on do-not-track lists (Federal Trade Commission, 2011). Baek and Morimoto’s (2012) research on ad avoidance identified two key triggers for consumers’ negative attitudes toward personalized advertising: (1) when the message is not well targeted to their needs and interests, and (2) when the message raises issues of privacy invasion. Beyond this, little is known about the specific circumstances or contexts that influence consumers’ perceptions about personalized advertising messages.

The reasons for this can be partially attributed to present-day researchers’ struggles to apply existing communication theory in examining the effects of personalized mass-mediated communication. Advancing technology has generated new forms of communication that span the structural and functional characteristics of mass and interpersonal communication. As a result, some scholars have looked to various mass communication theories to explain and predict online communication behaviors (e.g., LaRose & Eastin, 2004; Papacharissi & Rubin, 2002); while others argue that interpersonal communication theories offer more useful insights for analyzing online communication behaviors due to their seemingly dyadic nature (e.g., Dolnicar & Jordan, 2007; Luders, 2008). An alternative approach suggested by this study is to test and contrast theories from both traditions. A cross-disciplinary examination can expand understanding of the interpersonal goals that drive
users’ online information seeking and processing (Walther et al., 2011). Among the models considered relevant to this study are mass communication’s uses and gratifications theory and interpersonal communication’s expectancy violations theory, which offer conflicting predictions regarding consumers’ receptiveness to personalized advertising. As will be illustrated in the following section, uses and gratifications theory purports that audiences prefer media that satisfy their needs and interests, and are therefore more likely to perceive personalized messages positively. Conversely, expectancy violations theory suggests that personalized messages are more likely to elicit perceptions of privacy violation and result in negative reactions. An examination of both theories and how they contrast in predicting the effects of personalized advertising messages follows.

1.2 Uses & Gratifications Theory

Given the interactive nature of online media, uses and gratifications theory (UGT) is regarded by many researchers as the optimal theoretical basis for studying online media behavior (McMahan, 2004; Ruggiero, 2000). The underlying assumption of UGT is that audiences purposefully seek out specific media channels to satisfy their needs for information, entertainment, social interaction and/or escapism rather than simply serving as passive recipients (Katz, Blumler, & Gurevitch, 1974). Other scholars have criticized UGT for being overly functionalist in assuming audience motivations (Severind & Tankard, 1997); as well as presenting measurement challenges due to a reliance on audience recollection of memory (Katz, et al., 1974). However, Ruggiero (2000) argues that computer-mediated communication requires the expansion of current theoretical models of uses and
gratifications to take into account the “interpersonal potential of the Internet” (p.16). He
purports that concepts such as interactivity, demassification, hypertextuality, and
asynchroneity situate a modernized UGT “as a highly serviceable theory for the 21st
century” (p. 24).

Katz et al. (1974) originally identified five factors that comprise the foundation of
UGT: (1) audiences are considered active, not passive; (2) the initiative in linking
gratification and media choice lies with the audience member; (3) media channels compete
with other sources of satisfaction; (4) media consumers have enough self-awareness of their
media use, interests and motives to accurately report them; and, (5) value judgments about
the cultural significance of mass communication can only be assessed by the audience. Since
its inception, UGT has been applied to a number of emerging media channels and has
evolved to include an expanded list of associated gratifications. Papacharissi and Rubin
(2002) were one of the first researchers to apply UGT and the concept of “interpersonal
utility” to Internet usage, noting that consumers’ primary gratifications with this emerging
medium were information seeking, entertainment, and convenience. In 2005, Ko, Cho and
Roberts investigated the motivations and consequences associated with online advertising
within the constructs of UGT, and determined that consumers’ primary gratifications in that
context were entertainment, social interaction, information seeking and convenience. Most
recently, Hicks, Comp, Horovitz, Hovarter, Miki and Bevan (2012) surveyed users of
Yelp.com (a popular social website that allows members to write reviews and rate their
experiences with local businesses), and determined that information seeking, convenience, entertainment, and pass time were the primary gratifications sought by these users.

Consumers participating in these studies (as well as many others) consistently cite information seeking as a primary motivation in their online media use. While some studies found that respondents were more attracted to information formats that spoke to them in a more personalized voice (e.g., Hicks et al., 2012; Lim & Ting, 2012), others discovered that consumers had the opposite response to personalized messages (e.g., Morimoto & Chang, 2006; White et al., 2007). Recent scholars suggest new conceptualizations beyond information seeking that might better reflect the dynamics of today’s interactive media environment (Flanagin & Metzger, 2001; LaRose & Eastin, 2004; Papacharissi & Rubin, 2000). These studies expand the list of gratifications to include benefits typically associated with interpersonal communication, such as relationship maintenance, status seeking, and career promotion; and suggest that examining consumers’ perceptions about online media gratifications through the lens of interpersonal media theory might yield important insights about consumer motivations related to personalized advertising.

1.3 Expectancy Violations Theory

A number of researchers have examined the underlying causes of negative responses to personalized computer-mediated communication (CMC) by examining consumers’ responses to perceived privacy violation (e.g., Baek & Morimoto, 2012; Goldfarb & Tucker, 2011; Kelley, 2007). Burgoon, Parrot, LePoire, Kelley, Walther, and Perry (1989) define privacy as “the ability to control and limit physical, interactional, psychological, and
informational access to the self or one’s group” (p. 132). Their study examined privacy perceptions along five dimensions: psychological and informational violations, nonverbal interactional violations, verbal interactional violations, physical violations and impersonal violations. Two of these dimensions are clearly relevant when examining the effects of personalized advertising on consumers. First, the nearly limitless access to personal information offered by technology has the potential to heighten individuals’ sensitivity to informational violations. As Baek and Morimoto (2012) found, consumers are significantly less receptive to personalized advertising messages when they fear their informational privacy is in jeopardy. Secondly, EVT suggests that relationship length and level of intimacy between the message sender and receiver can also affect privacy violation perceptions. Correspondingly, personalized messages that originate from unspecified or unknown others have been shown to elicit perceptions of impersonal violations in the individuals who receive them (White et al., 2008).

These studies and others suggest that the emotional response to expectancy violations can create distraction in human subjects (Burgoon & Jones, 1976); therefore a personalized message that triggers a consumer’s perception of privacy violation is less likely to be effective than a message that does not elicit such an arousal. In direct contrast with many UGT-based studies, Turow, King, Hoofnagle, Bleakley, and Hennessy (2009) found that 66% of their 1,000 respondents did not want marketers to tailor advertisements to them based on their perceived interests. The primary reason cited for the respondents’ rejection of personalized messaging is privacy concerns brought about by online behavior tracking
technologies. Further, Lendenmann (2010) determined that sharing certain types of personal data with advertisers was significantly more “uncomfortable” for respondents than sharing other types of data. Among the categories of information considered the most sensitive were geographic and behavioral data. Conversely, demographic and contextual data (considered less private) were more willingly shared in exchange for information of value to the consumer (such as coupons or discount codes). This same study also revealed that consumer attitudes toward personalized advertising appear to be impacted by the specific channel of message delivery (clicking on website banner ads versus subscribing to e-newsletters). Study respondents generally preferred personalized advertising messages to be delivered via banner ads on a public website rather than via their personal e-mail address, as they found the former to be less intrusive.

1.4 Questions and Hypotheses

This two-part study seeks to extend our understanding of the perceptions of personalized messaging in a variety of contexts (through qualitative methods); then to examine reactions to specific examples of personalized advertising on the individuals who receive them (through quantitative data analysis). Based on previous research grounded by the theoretical framework of UGT and EVT, it is anticipated that consumers will welcome some forms of personalized advertising, while others will not be as well received. In order to develop meaningful parameters regarding the topics of relevance for quantitative analysis, the first portion of the survey sought to explore two questions:
RQ1: In what specific contexts do participants find personalized advertising messages to be helpful and why?

RQ2: In what specific contexts do participants find personalized advertising messages to be uncomfortable and why?

Acknowledging the findings of other researchers who have previously studied the effects of personalized messaging within these theoretical constructs, the second part of the study hypothesized that the level of perceived privacy violation would affect respondents’ attitudes in a few specific ways. First, as EVT suggests, messages that originate from known senders (with whom the receiver has an existing relationship) are less likely to trigger privacy violations in recipients as compared to messages from unknown senders. Therefore, the following hypothesis was tested.

H1: Personalized advertising messages from unknown senders will be more negatively perceived than messages from known senders, regardless of context or channel.

Secondly, based on previous studies reflecting individual differences in privacy violation perceptions related to delivery channel (e.g., Lendenmann, 2010; White et al., 2008), it was hypothesized that:

H2: Personalized advertising messages delivered via personal e-mail will be more negatively perceived than those delivered via public websites.
METHOD

2.1 Procedures

Data for this study was collected via an online survey that employed both open-ended and closed-ended questions utilizing Qualtrics survey software. The questionnaire took participants an average of 14 minutes to complete, and began by collecting basic demographic information (age, gender, years experience with the Internet, average daily time spent on the Internet, awareness of targeted advertising, and whether or not the respondent had ever been a victim of identity theft). Next, participants were presented with two open-ended questions relating to their experiences with personalized advertising. Once these open-ended questions were answered, participants were presented with a series of five hypothetical scenarios involving personalized advertising messages delivered in four different conditions: (1) from a known sender via personal e-mail, (2) from a known sender via a public website banner ad, (3) from an unknown sender via personal e-mail, and (4) from an unknown sender via a public website banner ad. Each of the scenarios purposely depicted message scenarios involving varying levels of perceived privacy intrusion, including: (1) shopping for books online, (2) researching travel options, (3) researching financial investments, (4) seeking legal advice, and (5) addressing health concerns.

2.2 Participants

Participants were recruited via convenience sampling utilizing e-mail and a variety of social media channels. Recruitment methods included e-mail distribution to students enrolled in various communication and business-related courses at a major southeastern university, as
well as posts on Facebook, Twitter, and LinkedIn that were initiated by the study author and shared by her associates in academia and the advertising industry. The purpose behind this methodology was to reach a sizable volume of people who were assumed to have experience with personalized online advertising. The initial sample consisted of 391 adults, and after missing data were treated with list wise deletion, a total of 311 responses were included in the data pool for qualitative and quantitative analysis. Respondents’ ages ranged from 18 to 79 years, with a median age of 31.5 and a mode of 20 ($n = 54$). While virtually every age between 18 and 79 was represented in the data pool, nearly half of the respondents (49%) were aged 18-22, likely due to the aforementioned recruitment methods. No incentive was offered for participating in this study; and to ensure that participants felt at ease sharing their personal experiences, detailed demographic data and respondent identities were not solicited.

### 2.3 Measures

The first part of the survey asked respondents if they could recall an instance when they received a personalized advertising message online that they found to be “helpful”; and if so, to describe the content of that message and why they considered it to be “helpful”. Secondly, they were asked if they could recall an instance when they received a personalized advertising message online that made them feel “uncomfortable”; and if so, to describe the content of that message and why it made them feel “uncomfortable”. The open-ended responses relating to context were then sorted into 15 topics representing five emergent themes using the constant comparative method associated with grounded theory (Glaser & Strauss, 1967). This method involves inductive category development through the
identification and comparison of units of meaning or themes (Maykut & Morehouse, 1994). Additionally, responses related to the characteristics of particular personalized messages and why respondents found them to be helpful or uncomfortable were likewise coded into emergent themes.

The quantitative portion of the survey utilized fixed “yes or no” responses to determine respondents’ privacy violation perceptions to a variety of personalized message conditions presented. Variables utilized in creating the conditions included five different contexts (shopping for books online, researching travel options, researching financial investments, seeking legal advice, and addressing health concerns); whether the message sender was known or unknown, and whether the message was delivered via e-mail or a public website banner ad (see survey instrument for additional details).

**RESULTS**

The results of this study suggest that consumers’ perceptions about personalized advertising are complex. The vast majority of respondents (96%) reported that they were aware that marketers use their personal data to target specific promotional messages to them, and their perceptions about this practice varied by respondent and by context. A relatively small number of the sample (13%) reported they did not like personalized advertising in any form. The remaining 87% expressed definite opinions about what value they expect in return for allowing marketers to track their online behavior, as well as what subjects are off limits.
3.1 Qualitative Data Analysis

Responses relating to the context in which participants found personalized messages to be either “helpful” (RQ1) or “uncomfortable” (RQ2), and the corresponding characteristics contributing to these perceptions were analyzed and coded separately. As shown in Figure 1, the five major themes that emerged related to context overlapped both sets of data, and included shopping ($n = 144$), interests ($n = 48$), self-improvement ($n = 60$), health ($n = 49$), and identity ($n = 21$). The majority of the responses related to shopping and interests were mentioned within the “helpful” context, while most of the responses related to self-improvement, health and identity were mentioned within the “uncomfortable” context. This pattern was not absolute, however; as responses related to all five contexts emerged from both the “helpful” and “uncomfortable” questions. More details about the specific personalized messages that respondents perceived as positive (“helpful”) and negative (“uncomfortable”) are discussed in turn.

**Helpful.** The open-ended data provided several important insights about the respondents’ positive associations with personalized advertising. Of the 15 topics mentioned, three themes emerged as primarily helpful to respondents: information related to shopping for products or services ($n = 119$), information related to individual interests, such as hobbies, entertainment, and travel ($n = 44$), and information related to self-improvement ($n = 13$), particularly when associated with the respondents’ career or school objectives. Many respondents shared positive comments related to their shopping experiences. For example, Jill said, “I spent time online searching bridesmaids dresses and I got useful ads for similar
style dresses that led me to the perfect dresses.” Likewise, John reported, “I had recently been looking for an online company that sold customized cell phone cases, and ads for different sites began popping up on my social media sites.”

In support of the interests theme, Brian described how personalized advertising provided helpful information relating to one of his hobbies:

When I was on Facebook, I saw an ad for local fly fishing opportunities, and although I never did seek them out, it was interesting to know that there were some in the area, because I do love to fly fish.

Relating to the self-improvement theme, Greg described how a personalized message was helpful to him in advancing his career goals, “I learned of a certification program [for my work that] I was interested in, and wouldn't have known of otherwise”.

When asked why they found these types of personalized ads to be helpful, the respondents mentioned a variety of characteristics, which were coded into two broad categories: when they provide relevant information \((n = 112)\), or when they enable the respondent to obtain better pricing on products or services of interest to them \((n = 44)\). Mark best described the relevancy theme in these terms, “They just always seem to be relevant to my preferences, which is better than being served up trash.” Likewise, Kelly described how personalized coupons and discounts are helpful to her:

I frequently receive coupons to stores or online retailers that I regularly shop. I enjoy getting the discounts because I would normally shop there anyway. I enjoy finding out about new items that are of interest to me that I might not have known about.
Brandon made it clear that although he occasionally benefits from the information provided by personalized advertising, he takes preventative measures to avoid having his online behavior tracked by marketers (seemingly due to privacy concerns):

I delete all of the cookies from the three separate browsers I use when I notice a substantial increase in personally targeted ads. Occasionally one is useful enough to look into, but I never click on the ad. I do a separate search for the product using DuckDuckGo [an anonymous search engine] in a private browsing session.

Interestingly, when Allison shared a positive comment about personalized advertising, she also alluded to the importance of her established relationship with the advertiser, “Item(s) advertised were ones I had actually looked at online, and the company was one I had proactively done business with in the past (i.e. I knew and trusted the advertiser).” As anticipated, many of the participants clearly described the positive aspects of personalized advertising in terms of the uses and gratifications theory (i.e., purposely satisfying their needs for information and entertainment). Figure 2 depicts some of the other salient comments offered by respondents related to “helpful” theme and how they were coded.

**Uncomfortable.** The respondents’ negative perceptions about personalized advertising extended to a considerably broader variety of topics. Of these, two dominant themes emerged regarding the types of personalized advertising that caused respondents to feel uncomfortable: personal relationships \((n = 29)\), and health \((n = 25)\). It is interesting to note that shopping \((n = 25)\), and interests \((n = 4)\) were mentioned within the “uncomfortable” category as well as the “helpful” category, indicating that participants’ attitudes about
personalized messaging are mixed. This implies that some messages might be perceived as too personal, extending beyond friendly recognition to suggest an inappropriate level of familiarity with consumers’ preferences and behaviors. Particularly sensitive topics for many respondents were relationship status (which included references to marriage, children, online dating, or divorce), as well as medical or sexual issues. Sarah shared her thoughts on how references to her family status made her feel uncomfortable, “After changing my status on Facebook to married, I immediately began receiving advertisements about family planning. It felt like such a private thing to advertise towards me.” Jennifer likewise expressed concerns about personalized messages related to her health issues and decided to take action, “When trying to lose weight I saw a number of weight loss ads on Facebook. It caused me to finally install ad blocker.”

When asked why they found these types of personalized ads to be uncomfortable, respondents mentioned a variety of characteristics which were coded into two overarching themes: insensitive messages, which were accurately targeted, but considered hurtful, embarrassing or “creepy” (n = 74), and inaccurate messages, which either did not apply to the receiver or were considered to be deceptive (n = 43). Kate described an insensitive personalized message she received in the following way, “I am married but without kids and I get ads for fertility treatment all the time. It's upsetting because we are trying, but it invasively reminds me that we are not ‘on schedule’ according to the Internet.” Melissa related an uncomfortable experience she had with personalized advertising that potentially exposed embarrassing personal information to her co-workers:
It was an ad for maternity clothing, which I received on my work computer prior to informing my employer of my pregnancy. I had purposely refrained from searching items related to pregnancy and had not included it in any e-mails.

Several respondents also related their discomfort with personalized messages they found to be overly invasive or creepy. For example, Jeff stated, “Can't remember specifics - was shopping for something and got something related later. It was like ‘how did they know that’? Additionally, Lauren recalled a travel-related message that disturbed her, “It was for a trip to a country I had mentioned in an email. Creepy”.

Inaccurate or deceptive messages were considered equally uncomfortable to many of the study respondents. Karen reported negative perceptions about a personalized ad that was off-target for her, “I received ads about drinking and drug rehabilitative services help for the elderly. My searches were not related to me, and I just felt like someone was getting TOO personal.” Likewise, Caroline reported discomfort with inaccurate personalized ads she received, “When I Google search specific diseases for my anatomy class I get ads about drug treatments and insurance companies. It makes me feel like it's pinning me as a sick.” Finally, Jordan expressed his disgust with ads he found to be deceptive, “I despise targeted dating ads and fitness ads. Way to[o] pushy and fake.”

As anticipated, many of the study respondents described the negative aspects of personalized advertising in terms that can clearly be linked to the expectancy violations theory (including perceptions of informational violation, and concerns about being tracked by
unknown others). Figure 2 depicts some of the other salient comments that emerged from the “uncomfortable” category and how they were coded.

3.2 Quantitative Data Analysis

**Relationship to sender.** Paired samples $t$-tests were conducted to test for significant perception differences in messages originating from known versus unknown senders. As shown in Table 1, significant differences were found in all conditions other than travel related banner ads, suggesting that messages from unknown senders generally elicit a greater perception of privacy violation than the same messages from known senders. This finding partially supports H1, which stated that messages from unknown senders will be more negatively perceived than messages from known senders, regardless of the context or channel.

**Delivery channel.** Paired samples $t$-tests were also conducted to test for significant differences between messages received via different channels. As shown in Table 2, although significant differences were noted in all scenarios except for messages from known senders in the context of travel and health, the direction was not consistent. Therefore, H2 was not supported. However, it is worth noting that significant positive differences were found in all contexts when the messages were from unknown senders. In other words, personalized e-mail messages from unknown senders were perceived as a significantly greater privacy violation than public website banner ads from these same senders across all contexts.
DISCUSSION

The purpose of this study was to explore the relationship between perceived privacy violation and the level of personalization in advertising messages. Rather than assuming targeted personalization efforts will result in uniformly positive responses (based on UGT), this research incorporated a relevant theory from interpersonal communication (EVT) to identify when a message might be considered inappropriately personal and why. By examining the effects of personalized messages in a variety contexts and conditions, the findings of this study illuminate circumstances under which consumers’ responses to such efforts are positive, as well as factors that might diminish their receptiveness. The results of this study suggest salient insights pertaining to the theory and practice of personalized communication efforts as well as highlight several historical, cultural and ethical considerations.

First, from a practical perspective, UGT suggests that the initiative in linking gratification with specific media experiences lies with the audience member. IBM Institute’s (2014) study of more than 30,000 global consumers revealed that consumers are willing to share some level of personal information with marketers if they receive something of value in exchange. Three trade-off preferences that Lendenmann (2010) examined in relation to personalized advertising were (1) offering free content with targeted (personalized) ads, (2) offering limited content with untargeted ads, and (3) paying for content in exchange for no ads. Only 11.5% of consumers in the Lendenmann (2010) study reported a preference for not being exposed to any advertising. This figure closely aligns with the findings of the present
study, which revealed that 12.8% of respondents did not wish to receive personalized advertising in any form. The important implication for communication practitioners concerned with marketing products and services as well as those seeking to influence public policy, education, and health care outcomes is that the majority of consumers are open to receiving some form of personalized messaging; however this data strongly suggest that it is essential to be sensitive to the types of messages recipients prefer as well as how they are delivered. For example, public health advocates seeking to promote anti-smoking messaging might choose to send personalized public service announcements (PSAs) to current smokers (identified based on their online purchasing behaviors). Such messaging might not be well received if it is personalized to the point where the receiver becomes aware that the sender is targeting the message to them based on their online behaviors.

Additionally, the results of this study suggest that the success of highly targeted personalization efforts depend on the extent to which these messages are perceived to be accurate. Consumers clearly reported higher privacy violation scores for personalized messages that were not relevant to their interests or needs. Consequently, communication practitioners hoping to deepen consumer relationships through personalization should maximize perceived utility before sending highly personalized messages. One possible application of this practice would be for educators to consider personalizing course offerings or learning materials to better align with a prospective student’s interests and academic progress. That being said, it is important to note that some of the personalized messages mentioned in this study were not well received (even when they were accurate) due to a
perception that the sender knew too much information about the recipient. This finding (supported by EVT) would suggest that practitioners considering messages related to subjects of a more personal nature (financial or legal services, for example) exercise extreme caution before employing personalized advertising tactics.

A third consideration raised by this study is the relationship status between the message sender and the recipient. As Morimoto and Chang (2006) found, consumers express less negative feelings toward messages from advertisers with whom they have had previous interactions (either through purchases or correspondence). This conclusion is supported by EVT as well as by the results of the present study, in which respondents reported significantly higher perceptions of privacy violation from personalized messages initiated by unknown senders. Therefore, practitioners (such as political candidates or policy advocates hoping to influence potential voters) should be mindful that while technology exists to target audiences with whom they do not have an established relationship, the expected response to personalized messages in this scenario is less likely to be favorable, and might damage the sender’s reputation with affected consumers (Baek & Morimoto, 2012).

Lastly, research suggests that communication practitioners would be wise to consider the channel by which they deliver personalized advertising messages. Participants in the present study reported significantly higher privacy violation scores when targeted with personalized messages via their personal e-mail address than via public website banner ads. To avoid a negative backlash, the results of this study and others imply that personalized messages sent via e-mail must be highly accurate, should not be inappropriately personalized
(i.e., insensitive, embarrassing or creepy), and should be sent only to recipients with whom the sender has an established relationship (either through previous purchase or correspondence).

From a broader perspective, this study raises a number of historical, cultural, and ethical considerations as well. First, might perceptions about personalized advertising be impacted by the current age and cultural context in which this study was conducted? Beniger predicted in 1987 that “the development of countless technologies with which to personalize mass communication...would bring forth a new infrastructure for major societal change” (p. 369). As we have witnessed, sophisticated data gathering technologies have rapidly evolved, and numerous studies (e.g., Callius, 2008; EIU, 2013; IBM, 2014) indicate mounting consumer concern about online privacy in the U.S. and abroad. Since the existing patchwork of privacy laws and practices is viewed by many as lacking in comprehensive protection, consumer rights advocates have developed legal, technical, and self-regulatory tools to better address the privacy concerns of U.S. Internet users. Their long term objectives include setting limits on government access to personal information, ensuring that new information and communication technologies are designed in ways that protect rather than diminish privacy, and developing appropriate federal legislation to set baseline standards for consumer privacy. Given the heightened concern about this emerging issue (regularly covered by national and global media), it seems likely that the historical and cultural context in which this study was conducted had some impact on the results.
LIMITATIONS AND FUTURE DIRECTIONS

Three factors impacted the shape of the participant sample and thus, might have biased the results of this study. First, it is reasonable to expect that respondents who are especially concerned about their online privacy would be less likely to participate in a study about online privacy, which likely contributed to a self-selection bias among respondents. Secondly, the study author recruited participants from among her social contacts, which included people employed in the advertising industry. These participants might generally be expected to have more positive perceptions about personalized advertising. In order to account for this factor, the survey included a question about work experience, and 23% of the respondents indicated that they currently or previously worked in the advertising industry. Lastly, as previously mentioned, the participant sample included a high concentration of respondents in the 18-22 year old age range. Previous research has shown that receptiveness to online information tracking and personalized advertising can vary based on the age of the respondent (e.g., IBM, 2014; Hicks et al., 2012; Purcell et al., 2012; Turow et al., 2012). Therefore, future studies should attempt to better balance the demographics of the participant sample in order to more accurately account for any age-related response differences.

One fruitful avenue for future research suggested by this study relates to perceived privacy concerns over location tracking. A notable number of participants indicated that personalized messaging targeted to them based on their location made them feel uncomfortable. Previous research has not consistently identified location tracking as a privacy concern among online consumers (likely because recent advances in the technology
of behavioral and geographical targeting are just beginning to escalate the use of this practice. As a result, privacy concerns related to an individual’s geographic location warrants further investigation, especially in light of consumers’ increasing reliance on mobile technologies.

CONCLUSIONS

This line of research holds great promise for contributing to both industry and academia since personalized online communication, driven by advancing technology, is predicted to flourish in future years. While a number of important practical, cultural, and ethical implications have been identified by this study, there is also important work to be done from a theoretical perspective. Computer mediated communication (CMC) is challenging our traditional conceptions of mass mediated and interpersonal communication due to its ability to function as either one or both channels, depending on the context. Indeed, McMahan (2004) purports that “there exist no pure instances of interpersonal communication or mass communication, instances in which one is not, in some capacity, influenced by the other” (p. 34). Communication scholars are therefore challenged to revisit traditional theories of mass and interpersonal communication, and consider how the evolving media landscape offers the potential to reshape the communication discipline.

As this study demonstrates, existing theoretical constructs do not adequately reflect and predict the outcomes of personalized online communication. Mass media theories such as uses and gratifications often predict positive outcomes related to personalized advertising that are not consistently demonstrated in all contexts. Interpersonal communication theories,
including expectancy violations theory, suggest valuable insights about individual perceptions related to computer-mediated communication, but cannot consistently predict attitudes about personalized advertising in all contexts. Contrary to scholars who cite confusion about the boundaries between interpersonal and mass communication as reason to abandon both concepts altogether, Beniger (1987) suggests an “empirical blurring” (p. 369) to better understand the practical and social implications of the evolving communication paradigm. Perhaps as Luders (2008) proposed, interpersonal and mass-mediated communication are situated on two axes, with various forms of emerging personalized communication existing in various points between them. This notion, supported by the findings of this study, implies that the intersection between interpersonal and mass-mediated communication offers stimulating and fertile ground in need of greater examination and study.
REFERENCES


APPENDIX
Table 1

*Perceived Privacy Violation of Personalized Advertising Sorted by Relationship to Sender*

<table>
<thead>
<tr>
<th>Sender</th>
<th>Channel</th>
<th>Relationship</th>
<th>Mean</th>
<th>SD</th>
<th>t</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bookseller</td>
<td>E-mail</td>
<td>Known Sender</td>
<td>.10</td>
<td>.31</td>
<td>-25.90***</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Unknown Sender</td>
<td>.79</td>
<td>.41</td>
<td></td>
</tr>
<tr>
<td>Bookseller</td>
<td>Banner ad</td>
<td>Known Sender</td>
<td>.24</td>
<td>.43</td>
<td>-11.47***</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Unknown Sender</td>
<td>.57</td>
<td>.50</td>
<td></td>
</tr>
<tr>
<td>Travel Agent</td>
<td>E-mail</td>
<td>Known Sender</td>
<td>.21</td>
<td>.41</td>
<td>-12.98***</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Unknown Sender</td>
<td>.59</td>
<td>.49</td>
<td></td>
</tr>
<tr>
<td>Travel Agent</td>
<td>Banner ad</td>
<td>Known Sender</td>
<td>.20</td>
<td>.40</td>
<td>0.26*</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Unknown Sender</td>
<td>.36</td>
<td>.48</td>
<td></td>
</tr>
<tr>
<td>Law Firm</td>
<td>E-mail</td>
<td>Known Sender</td>
<td>.55</td>
<td>.50</td>
<td>-10.68***</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Unknown Sender</td>
<td>.83</td>
<td>.38</td>
<td></td>
</tr>
<tr>
<td>Law Firm</td>
<td>Banner ad</td>
<td>Known Sender</td>
<td>.38</td>
<td>.49</td>
<td>-7.08***</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Unknown Sender</td>
<td>.55</td>
<td>.50</td>
<td></td>
</tr>
<tr>
<td>Financial</td>
<td>E-mail</td>
<td>Known Sender</td>
<td>.09</td>
<td>.29</td>
<td>-24.33***</td>
</tr>
<tr>
<td>Advisor</td>
<td></td>
<td>Unknown Sender</td>
<td>.76</td>
<td>.43</td>
<td></td>
</tr>
<tr>
<td>Financial</td>
<td>Banner ad</td>
<td>Known Sender</td>
<td>.25</td>
<td>.43</td>
<td>-10.73***</td>
</tr>
<tr>
<td>Advisor</td>
<td></td>
<td>Unknown Sender</td>
<td>.55</td>
<td>.50</td>
<td></td>
</tr>
<tr>
<td>Healthcare</td>
<td>E-mail</td>
<td>Known Sender</td>
<td>.23</td>
<td>.42</td>
<td>-18.98***</td>
</tr>
<tr>
<td>Provider</td>
<td></td>
<td>Unknown Sender</td>
<td>.79</td>
<td>.41</td>
<td></td>
</tr>
<tr>
<td>Healthcare</td>
<td>Banner ad</td>
<td>Known Sender</td>
<td>.29</td>
<td>.46</td>
<td>-10.17***</td>
</tr>
<tr>
<td>Provider</td>
<td></td>
<td>Unknown Sender</td>
<td>.56</td>
<td>.50</td>
<td></td>
</tr>
</tbody>
</table>

* p<.05    ** p<.01    *** p<.001
Table 2

*Perceived Privacy Violation of Personalized Advertising Sorted by Delivery Channel*

<table>
<thead>
<tr>
<th>Sender</th>
<th>Relationship</th>
<th>Channel</th>
<th>Mean</th>
<th>SD</th>
<th>t</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bookseller</td>
<td>Known sender</td>
<td>E-mail</td>
<td>.10</td>
<td>.31</td>
<td>-5.50***</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Banner ad</td>
<td>.24</td>
<td>.43</td>
<td></td>
</tr>
<tr>
<td>Bookseller</td>
<td>Unknown Sender</td>
<td>E-mail</td>
<td>.80</td>
<td>.40</td>
<td>8.50***</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Banner ad</td>
<td>.57</td>
<td>.50</td>
<td></td>
</tr>
<tr>
<td>Travel Agent</td>
<td>Known sender</td>
<td>E-mail</td>
<td>.21</td>
<td>.41</td>
<td>0.26*</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Banner ad</td>
<td>.20</td>
<td>.40</td>
<td></td>
</tr>
<tr>
<td>Travel Agent</td>
<td>Unknown sender</td>
<td>E-mail</td>
<td>.59</td>
<td>.49</td>
<td>8.89***</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Banner ad</td>
<td>.36</td>
<td>.48</td>
<td></td>
</tr>
<tr>
<td>Law Firm</td>
<td>Known sender</td>
<td>E-mail</td>
<td>.55</td>
<td>.50</td>
<td>5.77***</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Banner ad</td>
<td>.38</td>
<td>.49</td>
<td></td>
</tr>
<tr>
<td>Law Firm</td>
<td>Unknown sender</td>
<td>E-mail</td>
<td>.84</td>
<td>.38</td>
<td>10.71***</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Banner ad</td>
<td>.55</td>
<td>.50</td>
<td></td>
</tr>
<tr>
<td>Financial Advisor</td>
<td>Known sender</td>
<td>E-mail</td>
<td>.09</td>
<td>.29</td>
<td>6.75***</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Banner ad</td>
<td>.25</td>
<td>.43</td>
<td></td>
</tr>
<tr>
<td>Financial Advisor</td>
<td>Unknown sender</td>
<td>E-mail</td>
<td>.76</td>
<td>.43</td>
<td>8.22***</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Banner ad</td>
<td>.55</td>
<td>.50</td>
<td></td>
</tr>
<tr>
<td>Healthcare Provider</td>
<td>Known sender</td>
<td>E-mail</td>
<td>.23</td>
<td>.42</td>
<td>-2.56*</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Banner ad</td>
<td>.29</td>
<td>.46</td>
<td></td>
</tr>
<tr>
<td>Healthcare Provider</td>
<td>Unknown sender</td>
<td>E-mail</td>
<td>.78</td>
<td>.41</td>
<td>8.773***</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Banner ad</td>
<td>.56</td>
<td>.50</td>
<td></td>
</tr>
</tbody>
</table>

* p<.05  ** p<.01  *** p<.001
Figure 1

Coding Taxonomy for Context About Which Respondents Reported Receiving Personalized Advertising Messages

- **Shopping**
  - Products
  - Services

- **Interests**
  - Hobbies
  - Entertainment
  - Travel

- **Self Improvement**
  - Relationships
  - Career/School
  - Financial
  - Spiritual
  - Political

- **Health**
  - Medical
  - Sexual
  - Addiction

- **Identity**
  - Demographics
  - Location
Characteristics of Personalized Advertising Considered “Helpful” or “Uncomfortable”

- **Helpful**
  - Relevant Info
    - I found out about a whole leaf tea company I hadn’t heard of before based on tracking ads
    - A free PDF converter because I needed to convert from a PDF to Word
    - It was about scholarships. Helpful because it provided additional information and options
    - I was looking for a specific jacket and found it for a cheaper price because of an ad I saw on Facebook

- **Uncomfortable**
  - Insensitive
    - My wife has cancer. Since her diagnosis I’ve been solicited by online dating sites, funeral/burial services, life insurance, etc.
    - I was researching senior stuff for my 90 year old mother, while I was caring for her. After she passed, I was still being targeted for stuff
    - After someone was killed 1 block from my residence hall I went online to buy a pocket knife and for a while after that all the ads were of knives
  - Inaccurate
    - I am happily married, and I get ads all the time for ‘meet singles your age,’ or ‘meet singles in your city’