

**Internet Information and Communication Behavior during a Political Moment:
The Iraq War, March 2003**

Alice Robbin and Wayne Bunte
School of Library and Information Science
Indiana University
arobbin@indiana.edu, wbunte@indiana.edu

Revision submitted to
Journal of the American Society for Information Science and Technology
May 13, 2008

Abstract

This article explores the Internet as a resource for political information and communication in March 2003, when American troops were first sent to Iraq, offering us a unique setting of political context, information use, and technology. Employing a national survey conducted by the Pew Internet & American Life project. We examine the political information behavior of the Internet respondents through an exploratory factor analysis; analyze the effects of personal demographic attributes and political attitudes, traditional and new media use, and technology on online behavior through multiple regression analysis; and assess the online political information and communication behavior of supporters and dissenters of the Iraq War. The factor analysis suggests four factors: activism, support, information seeking, and communication. The regression analysis indicates that gender, political attitudes and beliefs, motivation, traditional media consumption, perceptions of bias in the media, and computer experience and use predict online political information behavior, although the effects of these variables differ for the four factors. The information and communication behavior of supporters and dissenters of the Iraq War differed significantly. We conclude with a brief discussion of the value of “interdisciplinary poaching” for advancing the study of Internet information practices.

Introduction

The Internet has evolved into an extraordinary resource for locating, communicating, and sharing information on all matters of everyday life, including financial transactions, products and services, health, education, jobs, and entertainment. It has also become a highly effective vehicle for mobilizing interest groups, political parties, ordinary citizens, and advocacy organizations and, increasingly, the sole source of information about politics, news, and events for many people (Raine & Horrigan, 2007). The Internet has made “readily [and freely] accessible the largest and most dynamic body of political information ever available to American citizens” (Bimber, 2001, p. 54) and altered the flows of political information to citizens. A large body of empirical research on the use of the Internet in daily life is now available that confirms the integration of the Web into daily life, as a taken-for-granted and as making a difference in people’s lives as a source of information and interpersonal communication (Boase, Horrigan, Wellman, & Rainie, 2006; Borgida & Stark, 2004; Case, Johnson, Andrews, Allard, & Kelly, 2004; Harwood & Rainie, 2004; Hector, 2003; Horrigan & Rainie, 2006; Horrigan et al., 2004; Katz & Rice, 2002; Kraut, Brynin, & Kiesler, 2006; Madden, 2006; Madden & Fox, 2006; Rainie & Horrigan, 2005, 2007; Wikgren, 2003).

The coming of age for the Internet also recognized the maturity of new media during a major international event, the Iraq War, which represented one of the first political moments aside from elections where the information environment and the mediated public sphere were noticeably political. In what has been called the first “War in Cyberspace” (Berenger, 2006), more than 75% of Americans turned to the Internet to learn about the Iraq War and for the latest news and updates (Rainie, Fox, & Fallows, 2003; Hamdy & Mobarak, 2004). The web facilitated much more than scanning the news about the war, however.

The Internet is, as Hamdy and Mobarak (2004) have commented, “unlike other media: not only a newsroom, but also a living room-type of medium where people can interact with others” (p. 249). The Internet supplied new forms of interactivity such as online forums, chat rooms, and weblogs and provided a technology for mobilizing supporters and dissenters of the United States’s entry into the war. Use of the Internet at that moment was also marked by declining use of traditional media and substitution of new media for information content, technological advances in media convergence, consolidation of the telecommunications sector and mass entertainment industry, globalization of information content and access, and information control by media and political elites (Barber, 2001; Kranich, 2004; Wilhelm, 2000).

Library and information science (LIS) researchers have examined many different types of information use, and the Internet has increasingly become a site of investigation. Studies of information use that focus on the role of technology, social relations, and demography as the context for the use environment are not yet extensive, however. Studies that rely on large scale data collection have not been the hallmark of research in information seeking and use since the late 1970s and early 1980s. Moreover, use of information with political content has been ignored by research in library and information science, with the exceptions that have focused on the political economy (e.g., Kranich, 2004).

By default, political information use has historically been the subject of empirical investigations by researchers outside LIS: by political scientists about knowledge of political events as it relates to political or civic participation (engagement); by mass communication researchers about use of media (channels) and program content and about the relationship between communication and participation; and by sociologists about information and communication practices as they relate to antecedent social structural conditions. We aim to contribute to the “political” as a site for LIS research in information use behavior and, specifically, the Internet as a medium of political information and communication.¹

We follow Kari and Savolainen’s (2003) recommendation that LIS researchers “understand the context and role of Internet searching” if they want to “understand real-life Web utilization” (p. 156) (see also Savolainen, 1999a, 1999b, 2000). Our research is not, however, designed to study how people discover or search for information. Rather, similar to Johnson (2003), we investigate “how an individual acts within an information field containing multiple information carriers” (p. 737). Reinforcing this view that it is important to understand Internet information activities, Case et al. (2004) advise that, “In terms of specific methods and questions, it will be crucial, in future investigations of this type, to tease out the distinct uses of the Internet” (p. 668). Mutz (2001), arguing from a political communication perspective, comments that “too large a proportion of the political information environment is now outside...traditional political communication forums,” and “the traditional distinctions between news and entertainment content are no longer very helpful” (p. 231; for evidence, see Pew Research Center, 2008).

This article explores the Internet as a resource for use and communication of political information in March 2003, when American troops were first sent to Iraq, offering us a unique setting of political context, information use, and the Internet, one outside the typical study of political information seeking during electoral periods. This study is decidedly exploratory and unites our interdisciplinary theoretical and empirical interests in information practices,

democratic theory, social inequality, communication, and the role of information and communication technologies (ICTs) in political life.

We investigate empirically the context of Internet information use activities: how demography contributes to choices about interest in and use of political information, the relationship between traditional media and Internet use of the news and political information, and communication of political information during critical political events. We make three contributions to LIS. The first contribution is to cross disciplinary boundaries in ways that contribute to LIS scholarship. We draw on theories and empirical findings from political science, mass communication, social psychology, and sociology and also decompose the conceptually problematic term “political participation/civic engagement” to identify information use and communication behavior, which we believe has not been adequately studied by these disciplines. Following Kari and Savolainen’s (2003) and Case et al. (2004), our second contribution is to examine information and communication behavior in the context of a political event, the entrance of the United States in the Iraq War. We also conceptualize communication as situated and embedded in informational contexts; there is no communication without content, and, as such, a more holistic view of information practices is needed to advance research in LIS. The third contribution follows: to reveal empirically facets of online political information and communication practices, explore how various theoretically informed antecedents predict how people use the Internet for political information and communication, and estimate the effects of these multivariate relationships as they relate to the Iraq War.

Part one (Theoretical Frameworks to Study Political Information Behavior) synthesizes the theoretical and empirical literature that we rely on to examine political information behavior at the start of the Iraq War. Case (2006) suggests and Shklovski, Kiesler, and Kraut (2006) and Wellman (2004) emphasize the need for theoretically-driven investigations designed to understand particular uses of the Internet. Kennedy, Wellman and Klement (2003) also urge an integrated behavioral, social, and psychological perspective. With this in mind, we model the relationship between information behavior as related to Internet political information use and antecedents that led to this use. Part two (Research Design) describes our research strategy, including the questions we ask and hypotheses, empirical model, statistical procedures, and the empirical data we rely on from the Pew Internet & American Life project (hereafter referred to as Pew). Our efforts constitute an attempt to grapple with the elusive concept of “context” and the limitations of secondary data analysis. Part three (Results) reports our findings on the Internet user population and their political information activities. We examine the political information behavior of the Internet respondents through an exploratory factor analysis; study the effects of personal demographic attributes and political attitudes, traditional and new media use, and technology on online behavior through multiple regression analysis; and assess the online political information and communication behavior of supporters and dissenters of the Iraq War. Part four (Discussion and Implications for Research in LIS) extends this research to briefly discuss its implications for LIS research on information practices. Crossing interdisciplinary boundaries and “dissecting” the theories, empirical research, and what is problematic in other disciplines yields opportunities for contributing to both an important domain of LIS research and to these other disciplines.

Theoretical Frameworks to Study Political Information Behavior

This section synthesizes the key theoretical frameworks and empirical research that inform our project on Internet information use acts, use of news and political information, and role of technology in the context of the beginning of the Iraq War in March 2003. We integrate theories about information and communication practices, political behavior and communication, social networks, and the roles of the mass media and information and communication technologies (ICTs) in political life to understand information behavior on the Internet during this unique period in recent American history.

LIS Everyday Information Seeking Behavior

We adopt Kari and Savolainen’s (2003) conception of “information action,” a “process in which the individual performs meaningful deeds in relation to information and knowledge...to achieve something” (p. 161). The antecedents of information use are psychological, behavioral, and social contextual attributes. Citizens are “active information gatherers and processors” (Mutz, 2001, p. 251). Hektor’s (2003) project to model information behavior in everyday life and use of information systems such as the Internet is helpful because he accounts for many information sources used by his respondents, which included the media and the individual’s social network (see also Fisher, Naumer, Durrance, Stromski, & Christiansen, 2005).

Also contributing to the conceptual underpinnings are Pettigrew’s (1999) “information ground” as place and Sonnenwald’s (1998) concept of an “information source horizon” to situate the Internet among other sources or channels of information as part of and in relation to the broader context of an information environment where information activities take place (see also Savolainen & Kari, 2004a, 2004b). We follow the recommendations of

various LIS researchers who attend to the importance of identifying relevant aspects of “context,” but, who, at the same time, grapple with the significant difficulty of identifying its relevant aspects (Courtright, 2007; Solomon, 2002; Sonnenwald & Iivonen, 1999; Talja et al., 1999).

Information, Its Relationship to Democratic Theory and Civic (Political) Engagement

Both historically at the beginning of the American republic and in modern political philosophy, democratic theory has served as the foundation for prescriptions related to information and its importance and to diffusion as a condition for maintaining liberty, stability, community, and governance, which all carry responsibilities shared by government, citizens, and organizations in the civil society (de Tocqueville, 1969; Schattschneider, 1960). The basic premises regarding information concern the intimate linkages between information and the political (social) order: between obtaining relevant information for deliberation and making informed decisions, between information and political voice, and between information and public accountability. Political disagreement (heterogeneity of viewpoints) is necessary “to sustain the vitality of democratic politics” (Huckfeldt, Johnson, & Sprague, 2004, p. 24). As such, citizens must have access to diverse views to become well informed (political knowledge) and to achieve civic competence (Alvarez & Brehm, 2002; Barber, 1984; Dahl, 1998; Delli Carpini & Keeter, 1996; Dewey, 1927; Galston, 2004; Lupia & McCubbins, 1998; Mutz & Martin, 2001). Civic competence requires investments such as education, which represents intellectual capital and is sometimes treated as a proxy for or synonymous with information; the assumption is that “education provides a pool of information directly and provides citizens [with] the skills needed to acquire [and use] new information effectively” (Bimber, 2001, p. 60; DiMaggio & Bonikowsk, 2008). Mechanisms—technologies such as mass media or information channels—for communicating competing and different perspectives and for deliberating ideas are necessary for creating an informed public opinion.

Empirical research over the past decades has shown that politics is not central to people’s lives, but that its saliency grows as political events impinge on people’s daily life. Americans are not fully or even well informed and generally have low levels of interest and participation in politics (Alvarez & Brehm, 2002; Delli Carpini & Keeter, 1996).² The attentive public who are active participants is small (Weissberg, 2003). Politics is viewed as a site of conflict and to be avoided (Eliasoph, 1998; Hibbing & Theiss-Morse, 2002; Mutz, 2006), although there is also evidence that citizens sustain political disagreement in their social networks (see Huckfeldt et al., 2004). Differences in resources, as measured by, for example, socioeconomic status (SES), size and density of social networks, and need (motivation) contribute to available time to participate in political life, interest, and attitude intensity (Bizer, Krosnick, Holbrook, Wheeler, Rucker, & Petty, 2004; Katz & Lazarsfeld, 1955; Kenny, 1992, 1994, 1998; Lazarsfeld, Berelson, & Gaudet, 1944; Putnam, 1993; Scheufele, 2000; Scheufele, Nisbet, Brossard, & Nisbet, 2004; Schlozman, Page, Verba & Fiorina, 2004a, 2004b; Shah, Kwak, & Holbert, 2001a; Shah, McLeod, & Yoon, 2001b; Verba, Schlozman, & Brady 1995). The “advantaged” are more highly motivated to acquire and process political information; better informed through reading and listening to “hard” news; use multiple media sources for political information; and are more exposed to diverse viewpoints as a result of more extensive (heterogeneous and low density) social networks and thus to higher levels of political disagreement (see Hart, 2001; Huckfeldt et al., 2004; Morrell, 1999; Mutz, 2002a, 2002b; Mutz & Mondak, 2006; Shah et al., 2001a). In other words, conditions that include a complex set of social structural characteristics, political knowledge, exposure to news, and heterogeneity of social networks as they relate to “political talk” (communication/information) account for differences in levels of political participation (civic engagement).

At the same time, it is important to acknowledge that the concept of political participation (civic engagement) is itself contested. Is the conventional “checklist” (see Janda et al., 1995, pp. 219-227) that has been used for more than 50 years appropriate for assessing what counts as political participation—under any conditions of event or medium? Are the traditional indicators of participation theoretically robust? Weissberg (2005) persuasively argues that the concept of political participation (civic engagement) is problematic, lacking in conceptual clarity, vague, theoretically incoherent, fundamentally flawed, and analytically useless, requiring that it be disentangled and that the concept be precisely defined (see pp. 17-44 for his assessment). We recognize the theoretical issues raised by Weissberg, but cannot solve them; instead, we extend traditional understandings of what constitutes participation (engagement) and modify them as they relate to the online environment during this political moment of the Iraq War. For purposes of our discussion and the limitations of the Pew survey data, we confine ourselves to a more modest assessment of what might count as political participation (civic engagement) acts in the online environment. Our study does, however, acknowledge Weissberg’s assessment of the need for more analysis of events outside electoral politics.

Information and Communication Technologies (ICTs), Media Use, and Civic Engagement

The erosion of civic participation has been decried (see Putnam, 1995a, 1995b, 2000), contributing to calls to reclaim democracy and recenter politics for citizens through the Internet (Boyte, 2005, pp. 540-541). Can the Internet stimulate political engagement? Two theories of political action dominate thinking by political scientists as they concern the Internet technology: mobilization (transformation, i.e., altering democratic practice, leading to political action) and reinforcement (normalization, i.e., continuing current practice with no effects on political engagement and existing inequalities) (Norris, 2001). The properties of ICTs provide the basis for claims that the Internet lowers the costs of information: interactivity, multi-directionality of communication and information, and data processing, archival, and mass broadcasting functions (see Robbin et al., 2004), properties whose applications provide a platform for information, social discourse, and mobilization (Mossberger, Tolbert, & McNeal, 2008, p. 67). Assumptions about investment and the cost of information also underlie conceptions about the role of ICTs for reducing social inequality traditionally associated with levels of political knowledge and for increasing participation in political or civic life.

Optimism, pessimism, and skepticism are the three strands of thinking regarding the use of ICTs to reinvigorate democracy. Both optimists and pessimists privilege ICT and its consequences for governance; the skeptics are less sure about ICT's impact. Proponents of the positive role of the Internet view technology as the source of innovation and transformation in democratic practice and politics and contend that ICTs will increase accessibility to a greater volume of information, reduce the cost of becoming informed, reduce the inequalities in access to information, and thus lower the costs of participation (Reingold, 2000). While pessimists and skeptics agree that ICTs offer these functionalities, pessimists contend that ICTs will only deepen existing inequalities. Skeptics are more cautious, suggesting that ICTs may mobilize new generations of young people who have used the technology for most of their life, while at the same time continue to reinforce existing statuses including political voice and to supplement existing communication channels (Bimber, 2003; Galston, 2002; Krueger, 2002).

What is the association between media use, information, and political behavior? Nearly all the research to date has focused on electoral politics. Bimber's (2001, pp. 58, 64, 59) early study of the 1996 and 1998 election campaigns found that: (i) traditional mass media were more highly associated with political interest than was the Internet; (ii) political interest explained somewhat more than half the "influence on citizen's attention to information resources" on the Internet; (iii) being young was positively associated with reading campaign information on the Internet and was "nearly as strong as its effect on newspaper reading"; and (iv) being male was positively associated with using the Internet for campaign information. SES was correlated with Internet access, but the association disappeared in a multivariate model of the relationship between participation measures when age, trust, and interest were added into the model, thus revealing that "*having access* to the wealth of political information and communication available through the Internet [was] not by itself connected to participation." Norris's (2002) studies conducted in the late 1990s and early part of the 21st century also found that the Internet did not alter political behavior. Nisbet and Scheufele (2004) found little evidence of the mobilization effect of the Internet, but did find that "frequent political discussion amplified the effects of campaign exposure" (p. 877). Park and Jang (2004) found that the intensity of political activism made a difference.

Normalization and reinforcement theses may or may not be supported; the context appears to make a difference. Specific individual characteristics, nature and extent of interpersonal and social relations and communication networks, specific communication situations and events, extent of political activism, and the environment of the Internet have differential effects on outcomes (see Huckfeldt et al., 2004; Ruggiero, 2000). The environment of the Internet makes it important, however, to distinguish among the functionalities and different uses of ICT because "applications have different implications for civic engagement" (Park, 2007, p. 28; Bimber, 2003), and applications and uses of the media (content preferences) have differential effects (see Shah et al., 2001a; Prior, 2005; Buente & Robbin, 2008). Shah et al. (2001a) find that the Internet "has a universally positive impact on [civic engagement, interpersonal trust, contentment] and across generations" (p. 154) (see also Shah et al., 2001b). Above all, as Xenos and Moy (2007) suggest in their summary of research on political (civic) engagement, it is the extent of political interest that counts (p. 709). We test their conjecture in our analysis.

Use of the New Media of Information and Communication Technologies for Political Information and News

Will the Internet supplement, amplify, or replace traditional media of print newspapers, television, and radio for news and political information? Do Internet technologies improve or enhance access to political information and social communication with political content, and to what extent? Wellman, Haase, Witte, and Hampton (2001) found that online information exchange contributed to participation in the community (see also Shah, Cho, Eveland, & Kwak, 2005). Price and Capella (2002) found that politically active citizens who read traditional media news and politics exhibited the same behavior on the Internet. These studies, as well as others, have found evidence that young people relied more than older people on the Internet, bypassing traditional media entirely.

The Pew Internet & American Life surveys provide a long series of empirical data for investigating which media are used to obtain political information. These surveys show a significant decline in use of traditional media like print newspapers and radio, no change in use of television, and a significant increase in use of the Internet between 1996 and 2006 (Fallows, 2007; Howard, 2005; Pew Research Center, 2000, 2002, 2006). Shah et al. (2001a) found that both traditional media of newspapers and television and the new media of the Internet contribute to information exchange, but “exposure to broadcast media” suggests that “specific content rather than overall use” makes the difference (p. 491). Howard (2005) found that digital technologies led to an increase in the number of people who consumed information with political content and consumed multiple sources of political news regularly, as well as searched for information that challenged their political perspectives.

Differences in informational content use are found to be influenced by SES (Shah et al., 2001a, 2001b). Shah et al.’s (2005) study of political information and interpersonal discussion (political talk) during the November 2000 election campaign found strong positive associations between traditional and Internet news media exposure and interpersonal political discussion; and that, overall, for the cross-sectional data they examined, there were “direct effects of informational media use on online and offline citizen communication” (p. 546). de Vreese’s (2007) survey of young people’s traditional and online media consumption, which he labelled “information seeking,” was positively related to political talk (p. 226). In a follow-up survey that examined news consumption, political talk, and concerns about the environment, Shah, McLeod et al. (2007) found that information seeking through traditional and online news sources “appeared to encourage orientations toward politics and society, namely, greater frequency of political talk and more pronounced concern about the environment,” which, “in turn, encourage[d] political consumerism” (p. 232).

Xenos and Moy (2007) warn us, however, that the effects of the new media may be “elusive” because they are contingent on a number of factors that include many social, psychological, and cognitive “characteristics of the users, media preferences, and social context” (p. 708), as well as media content use (see Easton & LaRose, 2000; Katz, Blumler, & Gurevitch, 1973/74; Lin, 1993; Shah et al., 2001a, 2001b; Stafford, Stafford, & Schkade, 2004). We examine these factors and whether content makes a difference as it relates to political information practices on the Internet.

Alternative Forms of Political Engagement in the Online Environment

We return to the problematic aspects of participation that Weissberg (2005) identified. To what extent are traditional measures of political and civic engagement relevant indicators in the online environment of the Internet? Put another way, does the medium of the Internet make a difference in engagement? Although research has shown that the *potential* benefits of digital technologies in political life lead to greater levels of civic engagement, improved information awareness, and enhanced communication with friend and familial ties, this research has not assessed these various aspects of political engagement online. Much of the research has either addressed citizen engagement on the Internet that was not political in nature (e.g., Weber, Loumakis, & Bergman, 2003) or have linked Internet use to classic offline participation (e.g. Bimber, 2003; Shah et al., 2001b; Tolbert & McNeal, 2003).

Whereas political participation indicators have been formulated on the basis of face-to-face and “on-the-ground” activity, students of social informatics and socio-technical systems would contend that ICT technologies themselves help shape and modify the social relations and activities that unfold around them (see King, 2000a, 2000b). ICT properties and the functionalities of different applications are expected to influence political and social relationships. Evidence indicates, for example, that the number of years of Internet experience (building the skill set) and type of technology to access the Internet (broadband or dial-up) influence online participation (see Pew project reports; Buente & Robbin, 2008; DiMaggio & Bonikowski, 2008; Easton & LaRose, 2000; Hargittai, 2003; Krueger, 2002). Far less research has, however, addressed the effects of new media on alternative forms of political engagement. Gibson, Lusoli, and Ward (2005), de Vreese (2007), and Krueger (2002) have suggested that the Internet requires different types of resources than have been traditionally associated with what constitutes the political and with what “counts” as participation in the online environment.

Krueger (2002) has, for example, estimated models of traditional and online forms of political participation to assess Internet-based political engagement. Following on this earlier work, Best and Krueger (2005) assessed patterns of online political activities to determine the representativeness of socioeconomic groups. Some selected online participatory forms from these studies included: communicating about campaigns, contacting a candidate online, registering preferences in an online campaign poll, visiting a candidate’s website, signing an Internet petition, and using the Internet to persuade someone about your view on an issue. Similarly, Shelley, Thrane, and Shulman (2006) modeled how demographic and psychological variables predicted e-political participation, constructing an e-political participation index that consisted of political information, news, specifics about a political candidate, responding to an Internet petition, and using e-communication to contact a public official.

In the studies that attempt to measure online political participation (civic engagement), the standard “themes” capture an information component of participation (e.g., access digital libraries and newspapers, political news). In addition, there is a clear communication component (e.g., contact a candidate online, use the Internet to persuade someone, communicate by email to contact a public official). Research by Puig-i-Abril and Rojas (2007) specifically assessed this subset of political activities as “expressive political participation.” However, expressive political participation constituted a single item index asking respondents to assess their frequency of opinion expression on the Internet about news and political matters. Each online political measure also assessed an activism factor (e.g., register preferences in an online campaign poll, sign an Internet petition, respond to an Internet petition). Unfortunately, these nuances of online political engagement are lost through methodological technique.

Except for Puig-i-Abril and Rojas (2007), all authors created online participation summation scales to operationalize online political activity. As a result, it is not possible to examine highly political information activities as opposed to communicative or activist engagements. These various facets of online political information practices need to be decomposed empirically and explored to determine how various theoretically informed antecedents predict these outcomes. Our research questions and hypotheses are designed to do so; we decompose the content of Internet political information practices.

The Political Context: Media Framing, War as Event, the Turn to the Internet

The conventionally held view, derived from democratic theory, regarding the role of the mass media is that news reporting must be objective and is achieved by “balancing perspectives from at least two sides of an issue” (Aday, Livingston, & Hebert, 2005, p. 5). There is, however, an alternative view that has been adopted by political communication theorists and students of political discourse: news framing is not neutral (Entman, 2007; Scheufele & Tewksbury, 2007; Schudson, 2007). The news is socially constructed. “The world of facts” do not have a “determinable meaning”; rather, “news reporting continuously constructs and reconstructs... problems, crises, enemies, and leaders” (Edelman, 1988, p. 1). Mass media institutions mediate and powerfully shape the information that reaches the public and directly and indirectly influence what people know about political events (Edelman, 2001; Reese, 2007). The mass media decide what is worth reporting and, as such, are a major source for people’s opinions on political issues, providing “cues about the probable future consequences of political actions, with information about the sources and authoritative support for policies, and with the groups with whom they identify” (Edelman, 1988, p. 3). Consequently, Edelman continues, their news accounts “reinforce established power structures and value hierarchies” (p. 34) in the process of constructing a social reality.

Although politics may be perceived as a source of disagreement and efforts are made to avoid political discussions in daily social interactions, it is nonetheless difficult if not impossible to escape or ignore the political realm. Politics is present in the information that the media transmit every day. Quite simply, politics and everyday life are intimately intertwined through media; the Internet serves as just another medium for living our lives in a mediated political culture (Jones, 2006).

Global conflicts fuel a need for quick and extensive information. These conflicts are, however, very rarely perceived directly, thereby requiring media to “confirm, neglect or decide the newsworthiness of actions and events” (Wilhelm, 2005, p. 3). If news consumption is event driven, then global conflicts only strengthen this perception. Individuals received day-to-day exposure to news media framing of the Iraq conflict whether they chose to or not.

Moreover, the remoteness of the global conflicts disposes people to “accept official interpretations of the events” which then become a “major source of legitimation” for the regime in power (Edelman, 1988, p. 25; Edelman, 1993) as news materials are organized and presented by defining the boundaries of the discourse about the conflict (Luther & Miller, 2005; Wilhelm, 2005). Even before the beginning of the 2003 Iraq War, there were significant “rally around the flag” frames: national security, military buildup, weapons of mass destruction, silencing protests and fear of terrorism (Dutta-Bergman, 2005). The history of press coverage leading up to war and its early stages was one of patriotism and support for the political elites (Aday et al., 2005; Kumar, 2006) and fears about terrorism (Papacharissi & Oliveira, 2008). As Edelman points out, “because classifications of problems, issues, and policies are major influences on political support and opposition, those that carry a strong emotional appeal are favored” (p. 235). Politicians who voiced opposition to a war observed no political advantage to do so, and the silence of political elites was often taken as consensus by the mainstream media (Luther & Miller, 2005). People who held opinions contrary to political elites and “challenged elite consensus” found an environment hostile to their views and were “delegitimized, marginalized, or dismissed by the media through various techniques such as relying on official sources or using negative expressions to describe the protestors” (p. 80).

For those who opposed the war, information not “tainted” by an agenda-setting administration proved more difficult to locate, especially in the mainstream media that did not provide a useful information source. Dissenters turned toward the Internet for two important reasons (Nah, Veenstra, & Shah, 2006; Huang, Schmierbach, Paek, de

Zuniga, & Shah, 2006). The Internet allowed access to a global news outlet, and global media were more likely to use different news frames for interpreting the Iraqi conflict (see Wilhelm, 2006). The Internet allowed for greater self-selection of content; dissenters could choose to consume all of their information about the Iraq War from bloggers or other forms of alternative press.

One model proposed for understanding the relationship between information, political dissent, and political engagement is offered by Nah et al. (2006), known as the Information, Expression, and Action (IEA) model. Their model builds on existing understandings in political communication involving information, media, and participation. New media use leads to increased political discussion; online news consumption increases political talk; online news use increases political participation; news use leads to greater forms of traditional political participation; TV news use decreases forms of traditional political engagement (for dissenters); face-to-face discussion increases forms of traditional political engagement; and online discussion increases forms of traditional political engagement. The authors constructed a model to predict engagement for political dissenters that captures much of the common understanding of the relationship between information and political participation; however, it lacks other aspects of online information use that may also contribute to the model. The model is based on the assumption that greater information automatically leads to improved polity. The underlying assumption is a connection between information, knowledge, and action. Obtaining information leads to (and is sometimes a proxy for) political knowledge, and more information leads to (results in) greater participation in the decision making (policy) process and to better policy choices. Yet, this assumption simplifies the complex process of obtaining and effectively using political information. The research we report here enhances the model proposed by Nah et al.

Summary

Personal demography, political orientations, and the social and technological environment serve as the context for Internet political information use activities. Information by the mass media, political elites, interpersonal networks, government, and other organizations influence the type of information that people encounter in their everyday life and influence their thinking and behavior. Psychological factors, including motivation, opinion, and attitudes, are relevant to whether information is attended to and how information is interpreted. People vary in their level of interest to search and process information. Mass media are “an integrated communication and social phenomenon” (Ruggiero, 2000, p. 7) that is part of the context of information use. Information technology (IT) is an integral part of information practices (Lievrouw, 2001; Orlikowski, 1992). As Courtright (2007) emphasizes, IT “plays a dual role in context...as a shaper of information practices and the object of shaping by other contextual factors and by users themselves” (p. 22). The mediating technology and its various functionalities and experience using the technology will affect access and use of information. Accounting for these factors may enhance the Internet effect models in Internet information behavior.

Research Design

Rational choice (“instrumental”) and psychological approaches for analyzing the relationship between information and participation (engagement) dominate the study of mass political (communication) behavior (see Bimber, 2001). Xenos and Moy (2007) explain that employing the rational choice perspective leads analysts to “expect to find direct relationships between changes in the cost and variety of information available and political engagement,” whereas “the psychological approach broadens the theoretical scope to include more nuanced views of Internet effects and focuses on interactions between the technology itself and user characteristics” (p. 705). Bimber (2001) persuasively argues that the psychological approach yields a better understanding. We adopt this “more nuanced view” in order to assess the contribution made by psychological, social structural and behavioral attributes, traditional media use, and technology as they relate to Internet political information and communication behavior.

Research Questions and Hypotheses

Drawing on the research discussed in the previous section, we examine Internet information activities-in-context to reveal empirically various facets of online political information behavior and explore how various theoretically informed antecedents predict these outcomes. To that end, we address the following research questions and hypotheses:

RQ1: What do people do online during the first non-electoral political moment?

RQ2: What explains political information activities on the Internet at the start of the Iraq War?

RQ3: How do supporters and dissenters differ in their online political information and communication activities?

With regard to specific antecedents, we advance the following hypotheses:

A large body of research in political and communication behavior finds that demography (SES) is an important factor for explaining political and communication activities.

H1. Sociodemographic characteristics are positively related to political information practices.

We expect that those with a high interest in politics will possess motives to participate online. In the context of the Iraq War, political interest is understood as a greater need to be informed through various forms of media.

H2. Political interest is positively related to online political information practices.

Traditional media use tends to complement, not substitute, new media use for political information acquisition.

H3. Traditional media use is positively related to online political information behavior and acquisition.

For months prior to the conflict, mass media framing communicated that the United States confronted a major threat from terrorists. As a result, we conjecture that those who are fearful or worried at the beginning of the Iraq conflict will pursue political information activities online. In addition, those who perceive the media as biased will prefer to engage in information seeking and other online activities seeking alternative points of view.

H4. Worry and fear about the Iraq War will be positively related to online political information activities

H5. Political efficacy and media perception are positively related to online political information behaviors.

Research has indicated that online experience and skills contribute to differential returns on Internet use. We expect that those who are frequent and experienced Internet users will be more likely to pursue online political participation. In addition, those with a high speed Internet connection will also experience greater gains in online political activity.

H6. Computer experience and use are positively related to online political information activities.

H7. Broadband connection is positively related to online political information activities.

Modeling Internet Political Information and Communication Activities

Figure 1 depicts the relationships between sociodemographic characteristics, political attitudes and opinion, traditional media use, level of political interest in and reaction to the news about the Iraq War, communication activities, and technology exposure. These factors serve as the context for predicting Internet political information use.

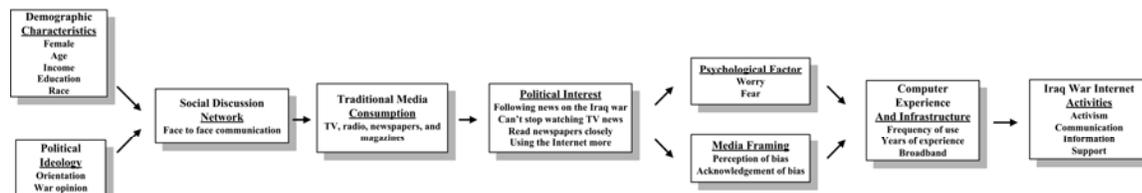


Figure 1. Model of Antecedents that Predict Internet Political Information Use

Research places great emphasis on sociodemographic factors to explain computer and Internet access (see van Dijk, 2005; Xenos & Moy, 2007); thus, this model seeks to capture differential returns of Internet use as it relates to social categories. There is, however, one component of the model that is not common in other models that examine political information behavior. In order to ascertain how an individual's political orientation and opinion about the war influence their political Internet activities, we include a psychological component that accounts for the motivation to pursue Internet political information and communication activities, in order to ascertain how an individual's political orientation, worries about the War, desire for alternative points of view and information, perceptions of the media, and opinions about and level of interest in following news about the war influence their political Internet use activities. Prior research in political communicative behavior has indicated a clear connection between greater discussion and political and civic engagement behavior. Traditional media use tends to complement, not substitute, new media use for political participation, although differences have been observed by age cohorts. Online experience and skills contribute to differential returns on Internet use and that type of Internet connection will affect online information activities.

Criterion variables: Political information behavior. The dependent variables are based on the results of the factor analysis (see below for a discussion of the statistical procedures employed in our analysis). These variables reveal dimensions of online political information practices that we anticipate will reflect the existing orientation of the survey questions. For example, we expect an information component because several questions ask about acquiring news and information on the Iraq War. (See Appendix Table A-2, panel 2 for summary statistics of information activity items that comprise the items used in the factor analysis displayed in Table 1.)

Independent variables: Antecedents to political information. Nineteen independent variables were included in the final analysis. Our review of the literature indicates that these variables have known relationships to political engagement. (See Appendix Table A-1 for descriptive statistics and comparison t-tests for demographics of Internet and non-Internet users; Appendix Table A-2 for items on political opinion about the Iraq War, traditional media use, political interest and psychological factors; Appendix Table A-3, panel 1 for computer experience and use. And Appendix Table A-4 identifies the question wording of the items and respondent answers for measurement.)

Sociodemographics. Our model seeks to capture differential returns of Internet use as it relates to social categories. We define *demographic characteristics* operationalized as variables: gender (*female=1, male=0*), age (*years*), income³ (*weighted scale*), education (*college educated=1, else=0*), and race (*white=1, non-white=0*).

Political attitudes and opinions. Attitudinal variables are operationalized as political ideology (*liberal=1, else=0*) and Iraq War sentiment (*oppose war=1, support war=0*).

Discussion. Respondents were asked if they first learn about the war by talking with others (*talking with others=1, else=0*).

Traditional media consumption. We define *traditional media* as newspaper, television use, radio and magazines. We employ a survey question that inquires about traditional media consumption. Traditional media consumption refers to those Internet users who received *most* of their news and information about the Iraq War from television, newspapers, radio or magazines only (*traditional media consumer=1, else=0*).

Political interest. This set of questions assesses interest in keeping abreast of political news about the war and also distinguishes by media type. Following news closely determines the overall interest in news about the Iraq War (*follow news closely, 4 item index, 4=very closely*). In addition, there are three questions about coverage and media use: can't stop watching TV war coverage (*can't stop watching=1, else=0*), reading the newspaper closely (*reading newspapers closely=1, else=0*), and using the Internet more (*using the Internet more=1, else=0*).

Psychological factors. To assess worry and fears about the Iraq War, we create an additive index of questions that addresses depression, difficulty concentrating, and trouble sleeping as a result of the Iraq War (*three point index*).

Media perception. This index captures attitudes towards media bias (framing): the importance of accessing alternative interpretations of the Iraq War and the role of the Internet for providing a point of view different than traditional media, thereby contributing to improved political knowledge (*online important for differing points of view =1, else =0*). Particularly astute citizens may observe media framing and perceive that information online provides points of view not available in newspapers and on TV (*online is different =1, else =0*).

Computer experience and use. Key Internet variables are identified as Internet use and type of connection because it influences Internet use; we employ questions related to Internet experience (*years*), frequency of use (*go online yesterday=1, else=0*), and the presence of high speed Internet in the home (*broadband connection=1, else=0*). Similar to traditional media consumption, we also allow for an intensity/exposure measure by determining if the respondent went online yesterday; Internet users who went online yesterday are more likely to be frequent new media consumers.

Data: Contents, Measurement, and Limitations of the Pew Internet & American Life Surveys

The Pew Internet & American Life Project conducted a national random digital dialing survey between March 20, 2003 and March 24, 2003. Nearly 1,500 people were interviewed, composed of non-Internet users ($n=561$) and Internet users ($n=929$). This survey has important advantages for assessing our research questions. It is a large national probability sample of respondents 18 years and older in the American population (see Rainie et al., 2003 for a discussion of the methodology). Random digit dialing telephone interviews capture the complexity of respondents' information and communication activities and computer technology experience and use. The richness of this detail makes this data collection unusual. The battery of questions specifically addressed various forms of online information and communication activities about the Iraq War; thus there was no concern for mistaking "more general measures that conflate using the Internet for entertainment purposes with political information seeking" (Kenski & Stroud, 2006, p. 178). The survey provides a number of questions allowing controls on demographics, media use, psychological variables, and political orientation. (See Appendix Tables A2, A3, and A4 for items selected for analysis.)

Two caveats about the data are necessary, however, before turning to our analysis. (We also take up additional ones in the final section of this paper.) (i) The number of observations varies by political information activity. Respondents did not engage in all or even most Internet political information use acts for which the Pew surveys collected data, which reduces the sample sizes for the results that we report. (ii) Information use activities are based on self-reports for which there are well-known problems (see Krosnick, 1999).

Statistical Procedures

We reduce the large number and diverse sources of Iraq War Internet information activities to a set of common dimensions (factors) with an exploratory factor analysis to discover latent patterns in the survey data (see Mislav, 1986; Hinton, 2004). Through this technique we can account for nuances in online political activities that have been lost, as we commented in the previous section, in prior research in online political behavior. Each factor that is revealed is then regressed with theoretically- and empirically-derived antecedents based on the literature that we have discussed.

Although we reveal multiple dimensions of online political information activity, we rely on our model to explore how various antecedents contribute to differential outcomes of Internet political information activities. We test for the influence of several predictor variables sequentially. This is particularly useful for testing theoretical assumptions because "the relative importance of a predictor may be judged on the basis of how much it adds to the prediction of a criterion, over and above that which can be accounted for by other important predictors" (Petrocelli, 2003, p. 10). Hierarchical regression represents such a procedure to test specific, theory-based hypotheses (Aron & Aron, 2003; Cohen, 2008). The order of the variables imposed on the data is a predetermined, theoretically-based decision. The focus in hierarchical regression is the change in predictability (R^2) "associated with predictor variables entered earlier in the analysis over and above that contributed by predictor variables entered earlier in the analysis" (Petrocelli, p. 11). As a result, change in R^2 and its corresponding change in F and p values represent the statistics of greatest interest in hierarchical regression.

The Internet sample of 929 respondents was reduced to 902 respondents with a definite position on the Iraq War (support or oppose). After deleting missing cases for the Iraq Internet activity items, the factor analysis analyzed 867 respondents. For the final regression analysis, deletion of missing cases in the independent variables resulted in a sample size of 500. We report unweighted counts for all survey data.

Results

The political context in which this survey was conducted captures the mood of the American public at the start of the Iraq conflict. Demographic differences between Internet users and non-users may account for why Internet users follow news about the war more closely; Appendix Table A1 indicates significant differences in nearly all the sociodemographic categories. Appendix Table A2 displays the various similarities and differences between non-Internet and Internet respondents. There was widespread support for the war: more than two out of every three Americans supported the president's decision to begin the Iraq War, and being an Internet user made little difference on the respondent's support of the president (Rainie et al., 2003). Non-Internet users were more likely to watch TV news about the war than Internet users and that Internet users monitored the news more closely about the war. In addition, Internet users were less likely to watch TV news coverage compared to nonusers; this finding supports observed trends that reveal the decline of TV viewing among Internet users. Internet and non-Internet users also responded differently to the war: more Internet users had a favorable opinion of the war compared to non-users.

By 2003, the Internet had matured as a useful provider of information (see Appendix Table A-3, panel 1). Of the total of 929 Internet users, nearly 60% ($n=549$) reported that they had gone online yesterday; more than 75% had at least three years experience and nearly 50% had six or more years of experience. In addition, broadband penetration had begun to make an impact: more than one in four (28%) Americans browsed on high speed connections.

Internet Activities involving the Iraq War

We turn now to identifying the Internet political information activities that took place during this highly politicized time. Appendix Table A3, panel 2 identifies the Internet activities of interest that were captured by the Pew survey. The most engaged Internet activity involving the Iraq War is looking for news about the war. More than 45% of the respondents ($N=929$) looked for news about the war online. Two of the most popular social communication activities were sending patriotic (29.9%) and prayer request (26.1%) emails. In addition, one in five Americans discussed the war over email with friends (19.8%). Surprisingly, more engaged political activities such as signing a petition online (6.9%) or getting information about a local rally (6.4%) were the least popular activities. Only about six percent of the respondents emailed an elected official about the war.

Internet Political Information and Communication Activities: Factor Analysis

During the start of the Iraq War, respondents used the Internet for more than just information gathering about the Iraq War. The Iraq War allowed for new forms of online political activity. We examined all the Iraq War Internet activities to determine whether they reveal more general categories of Internet information use and applied a

factor analysis to expose dimensions of Internet use. The factor analysis shown in Table 1 suggests four factors: activism, information, communication and support for the War that explain at least 50% of the variation among all the Iraq war Internet activities.⁴ This analysis addresses our second research question by uncovering multiple aspects of online political information activities.

[Table 1 about here]

Factor 1, labeled “Activism,” explains the greatest amount of variation. It comprises activities that clearly indicate activism and represents the most engaged online political information use behavior (e.g., signing a petition online, getting information about a local rally and demonstration). Factor 2, labeled “Information,” represents an information seeking component of online political activity. Four of the five activities involve getting or looking for information about the War.⁵ It is not surprising to find a communication dimension of online political activity. Factor 3, labeled “Communication,” demonstrates the strength of emailing and instant messaging when considering online political behavior. Factor 4, labeled “Support for the War,” reflects the unique context of the Iraq War. The acts that comprise this factor clearly reflect a patriotic orientation to Internet participation (e.g., email prayer requests, patriotic material). Cronbach’s alpha for the four factors range from .72 to .57, indicating reliable indicators for political information activity scales.

These factors allow us to distinguish different forms of online political information use behavior and Internet engagement. They help to answer our first research question about what respondents did online during this first non-electoral political moment. While Appendix Table A3 details the array of political activities that respondents engaged in on the Internet, the factor analysis in Table 1 provides a succinct summary. We use the factor scores generated from this analysis to construct the dependent variables that answer our second research question, “What explains political information activities on the Internet at the start of the Iraq War?”⁶ Our next step will be to observe which antecedents best predict these four political Internet dimensions. To that end, we consult our model to identify a set of predictor variables.

Predicting a General Model of Online Political Information Practices

To test the strength of hypothesized antecedents, we advance a general model of online political information practices and apply it equally to each dimension of Internet use revealed by the factor analysis. A multivariate regression model estimates the contribution of the predictors to the model.

Table 2 shows the results of the regression model using each of the four factors (Activism, Information, Communication, and Patriotism) as the dependent variable. There are eight blocks of variables, each representing a component of the model. Each block of variables is conceptualized as an important antecedent. Based on our previous analyses (Buente & Robbin, 2008), we expect computer experience and use variables to significantly contribute to the model. As a result, we place the block of variables in the most conservative position in the hierarchical regression order. By examining the additional variance explained by the introduction of each block, we are able to assess the statistical significance of the contribution of the block to the overall model. Four of the eight blocks are comprised exclusively of dummy variables. As a result of the dummy variables and the exploratory nature of this analysis, we focus primarily on interpreting the block of variables rather than individual coefficients.⁷

[Table 2 about here]

We hypothesized that demographic characteristics were positively related to Internet political information activity. However, being female was the only predictor to have significance in all four Internet activities; it was the only demographic predictor that had any significant effect on the model consistently across the four activities (see authors for coefficients of OLS hierarchical regression). Females were significantly less likely to engage in activism and information activities at the beginning of the Iraq war. However, they were significantly more likely to participate in communication and patriotic activities. Indeed, being female was the strongest predictor for communication ($\beta=0.17$) and patriotic activities ($\beta=0.20$). This finding is consistent with the literature on gender and Internet use. Compared to men, women tend to prefer email use and relationship building over email (Boneva & Kraut, 2002; Jackson, Ervin, Gardner, & Schmitt, 2001; Rainie et al., 2003).

Our second research question speculated about the antecedents that contribute to online political information behavior at the beginning of the Iraq conflict. Table 2 shows the explanatory strength of some antecedents over others. The activism and communication dependent variables have four significant blocks of variables. The information and support model have five and three blocks of significant variables, respectively. With five significant blocks, the model best explains online political information activity ($R^2=0.316$). Despite having the same number of significant blocks, the model does better at predicting activism ($R^2=0.262$) than communication ($R^2=0.126$).

Because our model accounts for political orientation, we suspect its predictive power is weighted toward specific political moments that motivate citizens to engage politically. This is witnessed by the strong contribution

of political orientation ($\Delta F= 45.915$) to explaining online activism, which provided the largest change in R^2 (0.152) attributable to one block of variables. A closer examination of the Internet activities that comprise the communication and support dependent variables suggests more politically passive online engagement. For both communication and support, the activities reflect email communication practices either through friends and family or through a political organization. Thus, the general model we propose is less successful explaining Internet communication and support ($R^2=0.136$) practices. In addition, the models do not share the same significant predictors. The most similar models are information and communication because they share four predictors (demographics, traditional media use, political interest, and computer experience and use).

Attitudes and beliefs contribute to motivating political behavior. Political orientation was highly significant in the activism ($\Delta F= 45.915$) and support ($\Delta F= 12.977$) model. As noted above, political orientation contributed the largest change in R^2 (0.152) for the activism model. It also supplied the second largest change in the support model (0.047). However, it was not significant in the information and communication models. As such, we only partially support the second hypothesis. Perhaps it is more useful to restate the hypothesis that political orientation is positively related to highly politically motivated and active online political practices.

Traditional media consumption is a significant predictor in two of the four models (information $\Delta F= 34.215$, communication $\Delta F= 11.312$). In addition, the traditional media block contributed to the largest gain in R^2 (0.061) in the information model. This is not unexpected, because traditional media are often seen as a complement to new media for understanding political information behavior. With respect to communication, this finding also supports work by Shah et al. (2005) and Nah et al. (2006) who demonstrate the causality of information to communication. Those who consume political information seek to engage in political communication; this finding is generally consistent with the literature in political communication. Traditional media use is an important antecedent for political behavior. As a result, hypothesis three is supported with respect to political information and communication online practices.

We expected that psychological and media perception variables would contribute to online political activity most notably at the beginning of a war. The results show the strength of media perception, but do not support the claim of psychological factors. Although worry and fear about the war may have been present, they did not influence online political activity when controlling for other factors. On the other hand, media perception or “disassociation” (Hwang, Schmierbach, Paek, de Zuniga, & Shah, 2006) did significantly explain online activism ($\Delta F= 12.774$) and information ($\Delta F= 12.528$) behavior. Our results do not support hypothesis four (psychological factors), but do support hypothesis five (media perception).

Computer experience and use variables were the last block added to the regression analysis. As the last block, the variables were subject to the most controls before introduction into the model. The explanatory strength of computer experience and use is demonstrated in Table 2 as this block of variables is significant in three of the four models: information ($\Delta F= 12.318$), communication ($\Delta F= 4.118$), and support ($\Delta F= 4.579$). Prior research has shown that broadband connection enhances user experience by allowing greater opportunities to engage in online content (Davison & Cotton, 2003; Horrigan & Rainie, 2002). Our findings support the importance of broadband for contributing to online political activities. In addition, experience and frequency of computer use also positively relate to online political engagement. Our last two hypotheses are supported.

Online Political Information and Communication Activities of Supporters and Dissenters

How did attitudes towards the war contribute to online information practices? Did political motivation influence the information seeking and communicative aspects of Internet experience? According to research conducted by Nah et al. (2006), the Internet made a difference in the lives of those who opposed the war. Do we find similar differences with the Pew Internet respondents?

In order to address our third research question, it is necessary to observe the differences between how supporters and dissenters engage in online political information activity. Table 3 shows the differences between supporters and dissenters: they differed in their information use, communication behavior, visits to web sites, opinions, and perspectives about the online environment for news.

[Table 3 about here]

Dissenters sought out information on the Web because it offered a different perspective than found in newspapers and TV ($t=-5.32$). Dissenters thought it was very important to obtain online news, information, and opinions about the war, particularly points of view that were different from traditional news sources ($t=-6.14$) and different from official government sources ($t=-6.23$). We find statistically significant differences between supporters and dissenters for the web sites they visited, including American newspapers ($t=-4.09$), groups that opposed the war ($t=-0.05$), and organizations thought of as sources of non-traditional news or alternative commentary ($t=-4.97$). Dissenters differ significantly in their email use and gathering information about the Iraq war. Overall, they are more

politically engaged in activities such as looking for information about a rally ($t=-9.19$), signing a petition for or against the War ($t=-7.00$), or sending an email to an elected official ($t=-6.20$).

Appendix Table A2 indicates the differences in psychological reactions to the War. Dissenters were more depressed ($t=-9.93$), had more difficulty concentrating on work or normal activities ($t=-5.88$), and had more trouble sleeping ($t=-3.78$). Since nearly 80% of U.S. citizens supported going to war, the breakdown of supporters and dissenters among Internet users follows the same pattern (703/929=75.5%). The t values, however, report mean differences in political orientation. Liberals and Democrats are found among the dissenters; conservatives and Republicans make up a higher proportion of the supporters. In addition, we found differences in sociodemographics (available from the authors). Higher proportions of females and African-Americans are found among the dissenters. Higher percentages of dissenters have a college education, whereas supporters have higher percentages with a high school education. Age and income differences tend to be minimal between the two groups of Internet users.

Yet, it is also important to understand whether these differences still exist when demographics and other factors are controlled. Table 4 displays the predicted means for the four dependent variables in the regression models. These represent the four dimensions of online political information behavior revealed through the factor analysis. The predicted means are shown for the average Internet information and communication respondent, supporter, and dissenter.

[Table 4 about here]

The average Internet user had the highest predicted means for information (0.212) and communication (0.113). On average, most Internet users engaged in information and communication practices at the beginning of the Iraq War. For Iraq War supporters a slightly different picture emerges. Supporters had predicted means above the average user for information (0.238) and support (0.083) online activities, while scoring below average in activism (-0.105) and communication (0.083) activities. In contrast, Iraq War dissenters had predicted means above the average user for activism (0.505) and communication (0.217) and below the average user for information (0.123) and support (-0.225). In addition, predicted means for dissenters were well above the average user for activism and communication. Thus, compared to the average user, supporters were more likely to engage in online political practices of information and support, whereas dissenters were more likely to pursue online political activities of activism and communication.

Discussion and Implications for Research in LIS

The research presented here provides a glimpse into one particular kind of context, the political, at a particular moment in history, the entrance of the United States in the Iraq War in March 2003. How the Internet was used by a national sample of Americans in March 2003 represents multiple dimensions of online political engagement; these provide researchers with insights about how political contexts influence Internet information practices. Our research demonstrates that it is essential to decompose online information practices in context and online political information use in the specific context of political events.

In a highly political moment, we expect Internet users to engage in multiple activities: to become politically active, to seek information, to communicate, and to support a particular point of view. Looking for information about a rally or demonstration is different from looking for news or information about Iraq. One activity draws on political attitudes and beliefs and invokes passion for locating information to help express one's opinion; the other activity does not have the same political effect as the former. In highly political moments, we expect passion and emotion to motivate information seekers, leading to behavior that may not be well explained by more traditional LIS information seeking models. Incorporating affect or emotion into our models may contribute useful insights for the study of information practices.

In a significant political moment, it is not only one's interest in politics that contributes to what people accomplish online but also their motivations. The research presented here also demonstrates that supporters and dissenters engage in different political practices online. The regression analysis shows that these differences are not as obvious in information and communication practices, but are quite clear in activism and support activities. In the unique context of a nation deciding to go to war, we observe Internet habits that divide along lines of supporting or protesting the war. Our general model provided the least explanatory power for computer-mediated political communication. As such, research questions positing the antecedents for computer-mediated political communication during a significant political moment should be addressed. In addition, further research on Internet practices in unique contexts is needed if we are to better understand how the Internet domesticates into our lives.

Whereas our previous analysis demonstrated how social inequality continues to be relevant for general Internet information use (Buente & Robbin, 2008), this current analysis shows that political information behavior may be better explained through standard predictors in political communication and behavior than by user and other contextual characteristics identified by LIS research. And political orientation is more influential than the standard

predictors of Internet and information behavior for activism and support. These are among the unexpected findings of our project.

At the same time, however, we offer three caveats regarding the model that we applied and the survey data that we relied on. (i) We recognize that there are well-known problems associated with causal inference, as Halaby (2004) notes, the “problem of causal inference is fundamentally one of unobservables” (p. 508) and with assumptions about the causal order of events that take place (see Davis, 1985). Our model does not reflect the recursive (or reciprocal) relationships that may exist between attitudes, interpersonal communication, and information behavior. This linear model situates attitudes as temporally antecedent to interpersonal relations and information behavior; however, information behavior may, instead, be temporally antecedent to political attitudes or interpersonal relations. The data do not, however, provide us with guidance about temporal order. (ii) Models are parsimonious by nature, but, given the state of knowledge about and complexity of human behavior, will always be incomplete. We are acutely aware, and do not claim to take account, of the array of other contextual and situational factors that may potentially contribute to explaining Internet political information behavior (see “political efficacy” as analyzed by Easton & LaRose, 2000). (iii) We acknowledge that measurement problems will contribute to the robustness of our model, but, again, we are limited by the data that the Pew Internet & American Life project collected. Some of the relationships found in previous studies and that we hypothesized did not reach statistical significance. Although it would be ideal to develop a survey instrument capable of capturing all the nuances of previous research, as well as capturing the questions of interest to library and information science, secondary analysts are limited by the instrument designed by the original data collectors. Nonetheless, our confidence in the measurement of Internet political information behavior is maintained due to the large array of Internet information behavior questions that capture the wide variety of ways that people searched for political information and communicated about the Iraq War.

As we wrote at the beginning of this article, Case (2006) suggests and Wellman (2004) emphasizes the need for investigations that are theoretically-driven. Drawing on theories and models from mass communication, political science, social psychology, and sociology through the lens of social informatics has helped us achieve a better understanding of online information practices. We have benefited from “disciplinary poaching.” We are convinced that drawing more explicitly on robust theory, model-building, and empirical research from these disciplines will contribute to a better understanding of information practices as they pertain to information behavior in political contexts, although we confess that this task is not an especially easy undertaking. Crossing disciplinary boundaries requires identifying appropriate theoretical frameworks and clarifying concepts that are employed both within a discipline and across disciplines and recognizing theoretical, conceptual, and methodological lacunae. Our research projects are designed to make that contribution.

ACKNOWLEDGEMENTS

We thank the reviewers for their useful suggestions and our colleague John Paolillo of the School of Library and Information Science at Indiana University Bloomington for his advice. Of course, we alone are responsible for the analysis.

REFERENCES

- Aday, S., Livingston, S., & Hebert, M. (2005). Embedding the truth: A cross-cultural analysis of objectivity and television coverage of the Iraq war. *Harvard International Journal of Press/Politics*, 10(1), 3-21.
- Alvarez, R. M., & Brehm J. (2002). *Hard choices, easy answers*. Princeton: Princeton University Press.
- Aron, A., & Aron, E. (2003). *Statistics for psychology* (3rd ed.). Upper Saddle River, N.J.: Prentice Hall.
- Barber, B. R. (1984). *Strong democracy* (4th ed.). Berkeley, CA: University of California Press.
- Barber, B. (2001). The uncertainty of digital politics: Democracy’s uneasy relationship with information technology. *Harvard International Review*, 23(1), 42–47.
- Berenger, R. D. (2006). Introduction: War in cyberspace. *Journal of Computer-Mediated Communication*, 12(1), 176-188.
- Best, S. J., & Krueger, B. S. (2005). Analyzing the representativeness of Internet political participation. *Political Behavior*, 27(2), 183-216.
- Bimber, B. (2001). Information and political engagement in America: The search for effects of information technology. *Political Research Quarterly*, 54, 53–68.

- Bizer, G. Y., Krosnick, J. A., Holbrook, A. L., Wheeler, S. C., Rucker, D. D., & Petty, R. E. (2004). The impact of personality on cognitive, behavioral, and affective political processes: The effects of need to evaluate. *Journal of Personality, 72*(5), 994-1027.
- Bimber, B. (2003). *Information and American democracy: Technology in the evolution of political power*. New York: Cambridge University Press.
- Boase, J., Horrigan, J. B., Wellman, B., & Rainie, L. (2006). *The strength of Internet ties: The Internet and email aid users in maintaining their social networks*. Washington, DC: Pew Internet & American Life Project. Retrieved July 1, 2006, from http://www.pewinternet.org/pdfs/PIP_Internet_ties.pdf
- Boneva, B., & Kraut, R. (2002). Email, gender and personal relationships. In B. Wellman & C. A. Haythornthwaite (Eds.), *The Internet in everyday life* (pp. 372-403). Malden, MA: Blackwell Publishers.
- Borgida, E., & Stark, E. N. (2004). New media and politics: Some insights from social and political psychology. *American Behavioral Scientist, 48*(4), 467-478.
- Boyte, H. C. (2005). Reframing democracy: Governance, civic agency, and politics. *Public Administration Review, 65*(5), 536-546.
- Buente, W., & Robbin, A. (2008). Trends in Internet use, 2000-2004. *Journal of the American Society for Information Science and Technology*. (in press).
- Case, D. O., Johnson, J. D., Andrews, J. E., Allard, S., & Kelly, K. M. (2004). From two-step flow to the Internet: The changing array of sources for genetics information seeking. *Journal of the American Society for Information Science and Technology, 55*(8), 660-669.
- Cohen, B. H. (2008). *Explaining psychological statistics* (3rd Ed.). Hoboken, N.J.: Wiley.
- Courtright, C. (2007). The challenge of context in information behavior research. *Annual Review of Information Science and Technology, 41*, 273-306.
- Cummings, J. N., & Kraut, R. (2002). Domesticating computers and the Internet. *Information Society, 18*(3), 221-231.
- Dahl, R. A. (1998). *On Democracy*. New Haven, CN: Yale University Press.
- Davis, J. (1985). *The logic of causal order*. Beverly Hills, CA: Sage Publications, Inc.
- de Tocqueville, A. (1969). *Democracy in America*. (G. Lawrence, Trans.; J. P. Mayer, Ed.). Garden City, NY: Doubleday & Company, Inc.
- de Vreese, C. H. (2007). Digital renaissance: Young consumer and citizen? *Annals of the American Academy of Political and Social Sciences, 611*(1), 207-216.
- Delli Carpini, M.X., & Keeter, S. (1996). *What Americans know about politics and why it matters*. New Haven: Yale University Press.
- DiMaggio, P., & Bonikowski, B. (2008). Make money surfing the web? The impact of Internet use on the earnings of U.S. workers. *American Sociological Review, 73*(2), 227-250.
- Dutta-Bergman, M. J. (2005). Operation Iraqi freedom: Mediated public sphere as a public relations tool. *Atlantic Journal of Communication, 13*(4), 220-241.
- Easton, M. S., & LaRose, R. (2000). Internet self-efficacy and the psychology of the digital divide. *Journal of Computer-Mediated Communication, 6*(1). Retrieved April 21, 2008, from <http://jcmc.indiana.edu/vol6/issue1/eastin.html>
- Edelman, M. (1988). *Constructing the political spectacle*. Chicago: University of Chicago Press.
- Edelman, M. (2001). *The politics of misinformation*. New York: Cambridge University Press.
- Edelman, M. J. (1993). Contestable categories and public opinion. *Political Communication, 10*, 231-242.
- Eliasoph, N. (1998). *Avoiding politics: How Americans produce apathy in everyday life*. New York: Cambridge University Press.
- Entman, R. M. (2007). Framing bias: Media in the distribution of power. *Journal of Communication, 57*, 163-173.
- Fallows, D. (2007, February 6). Election newshounds speak up: Newspaper, TV and Internet fans tell how and why they differ. Retrieved February 7, 2007, from <http://pewresearch.org/pubs/406/election-newshounds-speak-up>
- Fisher, K., Naumer, C., Durrance, J., Stromski, L., & Christiansen, T. (2005). Something old, something new: Preliminary findings from an exploratory study about people's information habits and information grounds. *Information Research, 10*(2). Retrieved from <http://informationr.net/ir/10-2/paper223.html>
- Galston, W. A. (2002). The impact of the Internet on civic life: An early assessment. In E. C. Kamarck & J. S. Nye, Jr. (Eds.), *governance.com: Democracy in the information age* (pp. 40-58). Washington, DC: Brookings Institution Press.
- Galston, W. A. (2004). Civic education and political participation. *PS: Political Science and Politics, 37*(2), 263-266.

- Garson, G. D. (2008, March 29). Multiple regression. In *Statnotes: Topics in multivariate analysis* (Regression analysis chapter). Retrieved March 29, 2008, from <http://www2.chass.ncsu.edu/garson/PA765/regress.htm>
- Gibson, R. K., Lusoli, W., & Ward, S. (2005). Online participation in the UK: Testing a 'contextualised' model of Internet effects. *British Journal of Politics and International Relations*, 7(4), 561-583.
- Halaby, C. (2004). Panel models in sociological research: Theory into practice. *Annual Review of Sociology*, 30, 507-544.
- Hamdy, N., & Mobarak, R. (2004). Iraq war ushers in web-based era. In R. D. Berenger (Ed.), *Global media go to war: Role of news and entertainment media during the 2003 Iraq war* (pp. 245-254). Spokane, WA: Marquette Books.
- Hargittai, E. (2003). Informed web surfing: The social context of user sophistication. In P. Howard & S. Jones (Eds.), *Society online: The Internet in context* (pp. 257-74). Beverly Hills, CA: Sage Publications.
- Hektor, A. (2003). Information activities on the Internet in everyday life. *The New Review of Information Behaviour Research*, 4(1), 127-139.
- Harwood, P., & Rainie, L. (2004). *People who use the Internet away from home and work*. Washington, DC: Pew Internet & American Life Project. Retrieved May 10, 2005, from http://www.pewinternet.org/pdfs/PIP_Other_Places.pdf
- Hart, R. P. (2001). Citizen discourse and political participation: A survey. In W. L. Bennett & R. M. Entman (Eds.), *Mediated politics: Communication in the future of democracy* (pp. 407-432). New York: Cambridge University Press.
- Hibbing, J. R., & Theiss-Morse, E. (2002). *Stealth democracy: Americans' beliefs about how government should work*. Cambridge, UK: Cambridge University Press.
- Hinton, P. R. (2004). *Statistics explained*. London: Routledge.
- Horrigan, J., & Rainie, L. (2002). *The broadband difference: How online Americans' behavior changes with high speed Internet connections at home*. Washington, DC: Pew Internet and American Life Project.
- Horrigan, J., & Rainie, L. (2006). *The Internet's growing role in life's major moments*. Washington, DC: Pew Internet & American Life Project. Retrieved July 1, 2006, from http://www.pewinternet.org/pdfs/PIP_Major%20Moments_2006.pdf
- Horrigan, J., Garrett, K., & Resnick, P. (2004). *The Internet and democratic debate*. Washington, DC: Pew Internet & American Life Project. Retrieved October 28, 2004, from http://www.pewinternet.org/pdfs/PIP_Political_Info_Report.pdf
- Howard, P. N. (2005). Deep democracy, thin citizenship: The impact of digital media in political campaign strategy. *The Annals of the American Academy of Political and Social Science*, 597(1), 153-170.
- Huckfeldt, R., Johnson, P. E., & Sprague, J. (2004). *Political disagreement: The survival of diverse opinions within communication networks*. New York: Cambridge University Press.
- Hwang, H., Schmierbach, M., Paek, H.-J., de Zuniga, H. G., & Shah, D. (2006). Media dissociation, Internet use, and antiwar political participation: A case study of political dissent and action against the war in Iraq. *Mass Communication & Society*, 9(4), 461-483.
- Jackson, L. A., Ervin, K. S., Gardner, P. D., & Schmitt, N. (2001). Gender and the Internet: Women communicating and men searching. *Sex Roles*, 44(5/6), 363-379.
- Janda, K., Berry, J. M., & Goldman, J. (1995). *The challenge of democracy: Government in America* (4th ed.). Boston: Houghton Mifflin.
- Johnson, J. D. (2003). On contexts of information seeking. *Information Processing and Management*, 39(5), 735-760.
- Jones, J. P. (2006). A cultural approach to the study of mediated citizenship. *Social Semiotics*, 16(2), 365-383.
- Kari, J., & Savolainen, R. (2003). Toward a contextual model of information seeking on the Web. *The New Review of Information Behaviour Research*, 4(2), 155-175.
- Katz, J. E. & Rice, R. E. (2002). *Social consequences of Internet use: Access, involvement, and interaction*. Cambridge, MA: MIT Press.
- Katz, E., Blumler, J. G., & Gurevitch, M. (1973/1974). Uses and gratification research. *Public Opinion Quarterly*, 37(4), 509-523.
- Katz, E., & Lazarsfeld, P. F. (1955). *Personal influence*. New York: Free Press.
- Kennedy, T., Wellman, B., & Klement, K. (2003). Gendering the digital divide. *IT&Society*, 1(5), 72-96.
- Kenny, C. B. (1992). Political participation and effects from the social environment. *American Political Science Review*, 36(1), 259-267.
- Kenny, C. B. (1994). The microenvironment of attitude change. *The Journal of Politics*, 56(3), 715-728.

- Kenny, C. B. (1998). The behavioral consequences of political discussion: Another look at discussant effects on voter choice. *The Journal of Politics*, 60(1), 231-244.
- Kenski, K., & Stroud, N. J. (2006). Connections between Internet use and political efficacy, knowledge, and participation. *Journal of Broadcasting & Electronic Media*, 50(2), 173-192.
- Kling, R. (2000a). Learning about information technologies and social change: The contribution of social informatics. *The Information Society*, 16(3), 217-232.
- Kling, R. (2000b). Social informatics: A new perspective on social research about information and communication technologies. *Prometheus*, 18(3), 245-264.
- Kranich, N. (2004). *The information commons: A public policy report*. New York: The Free Expression Policy Project, Brennan Center for Justice, New York University School of Law.
- Kraut, R. E., Brynin, M., & Kiesler, S. (Eds.). (2006). *Computers, phones, and the Internet: Domesticating information technology*. Oxford; New York: Oxford University Press.
- Krosnick, J. (1999). Survey research. *Annual Review of Psychology*, 50, 537-567.
- Krosnick, J., Lupia, A., DeBell, M., & Donakowski, D. (2008). Problems with ANES questions measuring political knowledge. Retrieved March 27, 2008, from <http://www.electionstudies.org/announce/newsltr/20080324PoliticalKnowledgeMemo.pdf>
- Krueger, B. S. (2002). Assessing the potential of Internet political participation in the United States: A resource approach. *American Politics Research*, 30(5), 476-498.
- Krueger, B. S. (2006). A comparison of conventional and Internet political mobilization. *American Politics Research*. 34(6), 759-776.
- Kumar, D. (2006). Media, war, and propaganda: Strategies of information management during the 2003 Iraq war. *Communication & Critical/Cultural Studies*, 3(1), 48-69.
- Lazarsfeld, P., Berelson, B., & Gaudet, H. (1944). *The people's choice*. New York: Columbia University Press.
- Lievrouw, L. A. (2001). New media and the "pluralization of life-worlds." *New Media & Society*, 3(1), 7-28.
- Lin, C. A. (1993). Modeling the gratification-seeking process of television viewing. *Human Communication Research*, 20(2), 224-244.
- Liska, A. E. (1974). Emergent issues in the attitude-behavior consistency controversy. *American Sociological Review*, 39(2), 261-272.
- Lupia, A., & McCubbins, M. D. (1998). *The democratic dilemma: Can citizens learn what they need to know?* Cambridge: Cambridge University Press.
- Luther, C. A., & Mark Miller, M. (2005). Framing of the 2003 U.S.-Iraq war demonstrations: An analysis of news and partisan texts. *Journalism & Mass Communication Quarterly*, 82(1), 78-96.
- Madden, M. (2006). *Internet penetration and impact*. Washington, DC: Pew Internet & American Life Project. Retrieved July 1, 2006, from http://www.pewinternet.org/pdfs/PIP_Internet_Impact.pdf
- Madden, M. and Fox, S. (2006). *Finding answers online in sickness and in health*. Washington, DC: Pew Internet & American Life Project. Retrieved July 1, 2006, from http://www.pewinternet.org/pdfs/PIP_Health_Decisions_2006.pdf
- Mislevy, R. J. (1986). Recent developments in the factor analysis of categorical variables. *Journal of Educational Statistics*, 11(1), 3-31.
- Morrell, M. E. (1999). Citizens' evaluations of participatory democratic procedures: Normative theory meets empirical science. *Political Research Quarterly*, 52(2), 293-322.
- Mossberger, K., Tolbert, C. J., & McNeal, R. S. (2008). *Digital citizenship: The Internet, society, and participation*. Cambridge, MA: The MIT Press.
- Mutz, D. C. (2001). The future of political communication research: Reflections on the occasion of Steve Chaffee's retirement from Stanford University. *Political Communication*, 18, 231-236.
- Mutz, D. C. (2002a). The consequences of cross-cutting networks for political participation. *American Journal of Political Science*, 46(4), 838-855.
- Mutz, D. C. (2002b). Cross-cutting social networks: Testing democratic theory in practice. *American Political Science Review*, 96(1), 111-126.
- Mutz, D. C. (2006). *Hearing the other side: Deliberative versus participatory democracy*. New York: Cambridge University Press.
- Mutz, D., & Martin, P. S. (2001). Facilitating communication across lines of political difference: The role of mass media. *American Political Science Review*, 95(1), 97-114.
- Mutz, D. C., & Mondak, J. J. (2006). The workplace as a context for cross-cutting political discourse. *The Journal of Politics*, 68(1), 140-155.

- Nah, S., Veenstra, A. S., & Shah, D. V. (2006). The Internet and anti-war activism: A case study of information, expression, and action. *Journal of Computer-Mediated Communication*, 12(1), 230-247.
- Nisbet, M. C., & Scheufele, D. A. (2004). Political talk as a catalyst for online citizenship. *Journalism & Mass Communication Quarterly*, 81(4), 877-
- Norris, P. (2001). *The digital divide: Civic engagement, information poverty and the Internet worldwide*. New York: Cambridge University Press.
- Norris, P. (2002). Revolution, what revolution? The Internet and U.S. elections, 1992-2000. In E. C. Kamarck, & J. S. Nye, Jr. (Eds.), *governance.com: Democracy in the information age* (pp. 59-80). Washington, DC: Brookings Institution.
- Orlikowski, W. (1992). The duality of technology: Rethinking the concept of technology in organizations. *Organization Science*, 3(3), 398-427.
- Papacharissi, Z., & Oliveira, M. (2008). News frames terrorism: A comparative analysis of frames employed in terrorism coverage in U.S. and U.K. newspapers. *Harvard International Journal of Press/Politics*, 13(1), 52-74.
- Park, H. M. (2007). *How does electronic government affect civic engagement?* Unpublished doctoral dissertation, Indiana University, Bloomington.
- Park, H. L., & Jang, J. W. (2004). Internet effects on voting: Political Internet users vs. non political Internet users. Paper presented at the annual meeting of the American Political Science Association, Philadelphia, PA.
- Petrocelli, J. V. (2003). Hierarchical multiple regression in counseling research: Common problems and possible remedies. *Measurement & Evaluation in Counseling & Development*, 36(1), 9.
- Pettigrew, K. E. (1999). Waiting for chiropody: Contextual results from an ethnographic study of the information behavior among attendees at community clinics. *Information Processing & Management*, 35(6), 801-817.
- Pew Research Center For the People & the Press. (2000). *Internet sapping broadcast news audience*. Washington DC: Pew Research Center. Retrieved July 30, 2005, from <http://people-press.org/reports/print.php3?ReportID=36>
- Pew Research Center for the People & the Press. (2002). *Public's news habits little changed by September 11*. Washington DC: Pew Research Center. Retrieved July 30, 2005, from <http://people-press.org/reports/pdf/156.pdf>
- Pew Research Center For The People & The Press. (2006). Maturing Internet News Audience – broader than deep: Online papers modestly boost newspaper readership. Retrieved March 13, 2008, from <http://people-press.org/reports/pdf/282.pdf>
- Pew Research Center. Project for Excellence in Journalism. (2008). The Daily Show: Journalism, Satire or Just Laughs? Retrieved May 9, 2008, from <http://pewresearch.org/pubs/829/the-daily-show-journalism-satire-or-just-laughs>
- Price, V., & Cappella, J. N. (2002). Online deliberation and its influence: The Electronic Dialogue Project in campaign 2000. *IT and Society*, 1, 303-328.
- Prior, M. (2005). News vs. entertainment: How increasing media choice widens gaps in political knowledge and turnout. *American Journal of Political Science*, 49, 577-592.
- Puig-i-Abril, E., & Rojas, H. (2007). Being early on the curve: Online practices and expressive political participation. *International Journal of Internet Science*, 2(1), 28-44.
- Putnam, R. D. (1993). *Making democracy work: Civic traditions in modern Italy*. Princeton, NJ: Princeton University Press.
- Putnam, R. D. (1995a). Bowling alone: America's declining social capital. *Journal of Democracy*, 6(1), 65-78. Retrieved January 12, 2003, from <http://jodyb.net/school/putnam.html>
- Putnam, R. D. (1995b). Tuning in, tuning out: The strange disappearance of social capital in America. *PS-Political Science & Politics*, 28, 664-683.
- Putnam, R. D. (2000). *Bowling alone: The collapse and revival of American community*. New York: Simon & Schuster.
- Rheingold, H. (2000). *The virtual community: Homesteading on the electronic frontier*. Boston: MIT Press.
- Rainie, L., & Horrigan, J. (2005). *Internet: The mainstreaming of onlife life*. Washington, DC: Pew Internet Life Project. Retrieved May 10, 2005, from http://www.pewinternet.org/PPF/r/148/report_display.asp
- Rainie, L., & Horrigan, J. (2007). *Election 2006 online*. Washington, DC: Pew Internet Life Project. Retrieved January 20, 2007, from http://www.pewinternet.org/pdfs/PIP_Politics_2006.pdf

- Rainie, L., Fox, S., & Fallows, D. (2003). *The Internet and the Iraq War: How online American have used the Internet to learn war news, understand events, and promote their views*. Washington, DC: Pew Internet & American Life Project. Retrieved May 10, 2004, from http://www.pewinternet.org/pdfs/PIP_Iraq_War_Report.pdf
- Reese, S. D. (2007). The framing project: A bridging model for media research revisited. *Journal of Communication*, 57, 148-154.
- Robbin, A., Courtright, C., & Davis, L. (2004). ICTs and Political Life. *Annual Review of Information Science and Technology*, 38, 411-462.
- Ruggiero, T. E. (2000). Uses and gratifications theory in the 21st century. *Mass Communication & Society*, 3(1), 3-37.
- Rummell, R. J. (1967). Understanding factor analysis. *The Journal of Conflict Resolution*, 11(4), 444-480.
- Savolainen, R. (1999a). The role of the Internet in information seeking. Putting the networked services in context. *Information Processing and Management*, 35(6), 765-782.
- Savolainen, R. (1999b). Seeking and using information from the Internet: The context of non-work use. In T. D. Wilson, & D. K. Allen (Eds.), *Exploring the contexts of information behaviour: Proceedings of the Second International Conference on Research in Information Needs, Seeking and Use in Different Contexts* (pp. 356-70). London: Taylor Graham.
- Savolainen, R. (2000). Embarking on the Internet: What motivates people? *Aslib Proceedings*, 52(5), 185-193.
- Savolainen, R., & Kari, J. (2004a). Conceptions of the Internet in everyday life information seeking. *Journal of Information Science*, 30(3), 219-226.
- Savolainen, R., & Kari, J. (2004b). Placing the Internet in information source horizons: A study of information seeking by Internet users in the context of self-development. *Library & Information Science Research*, 26(4), 415-433.
- Schattschneider, E. E. (1960). *A semisovereign people*. New York: Holt, Rinehart & Winston.
- Scheufele, D. A. (2000). Talk or conversation? Dimensions of interpersonal discussion and their implications for participatory democracy. *Journalism and Mass Communication Quarterly*, 77(4), 727-723.
- Scheufele, D. A., & Tewksbury, D. (2007). Framing, agenda setting, and priming: The evolution of three media effects models. *Journal of Communication*, 57, 9-20.
- Scheufele, D.A., Nisbet, M.C., Brossard, D., & Nisbet, E.C. (2004). Social structure and citizenship: Examining the impacts of social setting, network heterogeneity, and informational variables on political participation. *Political Communication*, 21(3), 315-338.
- Schudson, M. (2007). The anarchy of events and the anxiety of story telling. *Political Communication*, 24, 253-257.
- Shklovski, I., Kiesler, S., & Kraut, R. (2006). The Internet and social interaction: A meta-analysis and critique of studies, 1995-2003. In R. E. Kraut, M. Brynin & S. Kiesler (Eds.), *Computers, phones, and the Internet: Domesticating information technology* (pp. 251-264). Oxford; New York: Oxford University Press.
- Schlozman, K. L., Page, B. I., Verba, S., & Fiorina, M. (2004a). *American democracy in an age of rising inequality*. Washington, D.C.: American Political Science Association Task Force on Inequality and American Democracy. Retrieved September 9, 2004, from www.aspaset.org
- Schlozman, K. L., Page, B. I., Verba, S., & Fiorina, M. (2004b). *Inequalities of political voice*. Washington, D.C.: American Political Science Association Task Force on Inequality and American Democracy. Retrieved September 9, 2004, from www.aspaset.org
- Shah, D. V., Kwak, N., & Holbert, R. L. (2001a). "Connecting" and "disconnecting" with civic life: Patterns of Internet use and the production of social capital. *Political Communication*, 18, 141-162.
- Shah, D. V., McLeod, M. J., & Yoon, S-H. (2001b). Communication, context, and community: An exploration of print, broadcast, and Internet influences. *Communication Research*, 28(4), 464-506.
- Shah, D. V., Cho, J., Eveland, W., & Kwak, N. (2005). Information and expression in a digital age: Modeling Internet effects on civic participation. *Communication Research*, 32, 531-565.
- Shelley, M. C., Thrane, L. E., & Shulman, S. W. (2006). Lost in cyberspace: Barriers to bridging the digital divide in e-politics. *International Journal of Internet and Enterprise Management*, 4(3), 228-243.
- Shah, D. V., McLeod, D. M., Kim, E., Lee, S. Y., Godlieb, M. R., Ho, S. S., & Breivik, H. (2007). Political consumerism: How communication and consumption orientations drive "lifestyle politics." *The Annals of the American Academy of Political and Social Science*, 611, 217-235.
- Shklovski, I., Kiesler, S., & Kraut, R. (2006). The Internet and social interaction: A meta-analysis and critique of studies, 1995-2003. In R. E. Kraut, M. Brynin & S. Kiesler (Eds.), *Computers, phones, and the Internet: Domesticating information technology* (pp. 251-264). Oxford; New York: Oxford University Press.

- Solomon, P. (2002). Discovering information in context. *Annual Review of Information Science and Technology*, 36, 229-264.
- Sonnenwald, D. H. (1998). Evolving perspectives of human information behaviour: Contexts, situations, social networks and information horizons. In T. D. Wilson, & D. K. Allen (Eds.), *Exploring the contexts of information behaviour: Proceedings of the Second International Conference on Research in Information Needs, Seeking and Use in Different Contexts* (pp. 176-190). London: Taylor Graham.
- Sonnenwald, D. H., & Iivonen, M. (1999). An integrated human information behavior research framework for information studies. *Library & Information Science Research*, 21(4), 429~V457.
- Stafford, T. F., & Stafford, M. R. (2001). Identifying motivations for the use of commercial web sites. *Information Resources Management Journal*, 14, 22-30.
- Stafford, T. F., Stafford, M. R., & Schkade, L. L. (2004). Determining uses and gratifications for the Internet. *Decision Sciences*, 35(2), 259-288.
- Talja, S., Keso, H., & Pietiläinen, T. (1999). The production of ‘context’ in information seeking research: A metatheoretical view. *Information Processing and Management*, 35, 751-763.
- Tolbert, C. J., & McNeal, R. S. (2003). Unraveling the effects of the Internet on political participation? *Political Research Quarterly*, 56(2), 175-185.
- van Dijk, J. A. G. M. (2005). *The deepening divide: Inequality in the information society*. Thousand Oaks, Calif.: Sage Pub.
- Verba, S., Schlozman, K. L., & Brady, H. E. (1995). *Voice and equality: Civic voluntarism in American politics*. Cambridge, MA: Harvard University Press.
- Weber, L. M., Loumakis, A., & Bergman, J. (2003). Who participates and why? An analysis of citizens on the Internet and the mass public. *Social Science Computer Review*, 21(1), 26-42.
- Weissberg, R. (2005). *The limits of civic activism: Cautionary tales on the use of politics*. New Brunswick, NJ: Transaction Publishers.
- Wellman, B. (2004). The three ages of Internet studies: Ten, five and zero years ago. *New Media & Society*, 6(1), 123-129.
- Wellman, B., & Haythornthwaite, C. A. (Eds.). (2002). *The Internet in everyday life*. Malden, MA: Blackwell Pub.
- Wellman, B., Haase, A., Witte, J., & Hampton, K. (2001). Does the Internet increase, decrease, or supplement social capital? *American Behavioral Scientist*, 45, 436-455.
- Wikgren, M. (2003). Everyday health information exchange and citation behaviour in Internet discussion groups. *The New Review of Information Behaviour Research*, 4(1), 225-239.
- Wilhelm, A. G. (2000). *Democracy in the digital age*. London: Routledge.
- Wilhelm, S. (2005). Covering the war in Iraq: Frame choices in American and German national newspapers [Electronic Version]. *Journal of Intercultural Communication*. Retrieved May 28, 2007, from <http://www.immi.se/intercultu>
- Xenos, M., & Moy, P. (2007). Direct and differential effects of the Internet on political and civic engagement. *Journal of Communication*, 57, 704-718.
- Zaller, J. (1992). *The nature and origins of public opinion*. New York: Cambridge University Press.

Notes

¹ We use “behavior,” “practices,” “activities,” and “use” nearly interchangeably in this paper, although purists will no doubt argue with us that these nouns are not synonyms. “Participation” and “engagement” are the words favored by political science and mass communication for activities associated with political life. We use “political participation” interchangeably with “civic engagement,” but prefer “engagement” to “participation” for purposes of our analysis. For political scientists, political knowledge implies seeking information about politics.

² For evidence that Americans may be more politically informed than prior research has indicated, see Krosnick, Lupia, DeBell, and Donakowski’s (2008) analysis of how data from the American National Election Studies have been coded.

³ Income was a categorical variable transformed into a weighted scale using the following values:

5	Less than \$10,000
15	\$10,000 to under \$20,000
25	\$20,000 to under \$30,000
35	\$30,000 to under \$40,000
45	\$40,000 to under \$50,000

63	\$50,000 to under \$75,000
87.5	\$75,000 to under \$100,000
125	\$100,000 or more

⁴ It should be noted that one Iraq Internet activity, received email news alerts from a news organization or other Internet service, did not load on any of the four factors.

⁵ The fifth activity loading on this factor may still be considered an information seeking act since it asks about reading comments about the war online. Accordingly, it has the lowest weight (0.417) for the information factor.

⁶ Factor scores represent a more ideal dependent variable than summation scales as they are continuous and standardized. Standardized means they have been scaled so that they have a mean of zero and about two-thirds of the values lie between +1.00 and -1.00 (Rummell, 1967).

⁷ This approach is justified by Garson (2008) who states that the “incremental F test used with R^2 change must be used to assess the significance of a set of dummy variables. Do not use individual t-tests of b coefficients of the dummy variables” (Effect size measures section, para. 18).

Table 1

Factor Analysis of Iraq War Email and Internet Activities (N=867)

Iraq War Email and Internet Activities	Activism	Information	Communication	Support
Received email from an organization clearly against the war.	0.768			
Sign a petition online for or against the war	0.690			
Get information about how to get involved politically, including local rallies and demonstrations	0.672			
Used email to communicate with an elected official about the war	0.659			
Get information about the country and people of Iraq		0.703		
Get information about the reaction of financial markets		0.654		
Look for news about the war in Iraq		0.649		
Look for information about how to prepare for a possible terrorist attack		0.508		
Read or posted comments about the war in an online group, a bulletin board, or a chat room		0.417		
Used e-mail to discuss the war with members of your family			0.823	
Used e-mail to discuss the war with friends			0.794	
Used instant messaging to communicate with someone about the war			0.443	
Received or sent an email prayer requests				0.754
Received or sent patriotic material by e-mail				0.738
Received email from an organization clearly in favor of the war.				0.567
Cronbach's alpha	0.719	0.617	0.650	0.566

Note. Factor loadings with a weight less than 0.35 are not included in the table. Loadings represent varimax rotation using principal component factors. The activism factor explained 15.3% of the variance. The information factor explained 13.0%. The communication factor explained 11.6%. The patriotism factor explained 10.4%. Overall, all four factors explained 50% of the variability among the Iraq war Internet activities.

Table 2

Hierarchical Regression Analysis Summary for Predicting Iraq Internet Activity Factors (N=500)

Model, Step, and Predictor Variable	R ²	ΔR ²	ΔF	df (change)	Model, Step, and Predictor Variable	R ²	ΔR ²	ΔF	df (change)
Activism Model					Communication Model				
1. Demographics	0.031	0.031	3.175***	(5, 494)	1. Demographics	0.032	0.032	3.291***	(5, 494)
2. Political Orientation	0.184	0.152	45.915***	(2, 492)	2. Political Orientation	0.039	0.007	1.683	(2, 492)
3. Discussion	0.184	0.000	0.011	(1, 491)	3. Discussion	0.040	0.001	0.417	(1, 491)
4. Traditional Media Use	0.184	0.001	0.551	(1, 490)	4. Traditional Media Use	0.061	0.022	11.312***	(1, 490)
5. Political Interest	0.217	0.033	5.116***	(4, 486)	5. Political Interest	0.093	0.031	4.181***	(4, 486)
6. Psychological	0.218	0.000	0.246	(1, 485)	6. Psychological	0.095	0.003	1.528	(1, 485)
7. Media Perception/Reality	0.257	0.039	12.774***	(2, 483)	7. Media Perception/Reality	0.104	0.008	2.274	(2, 483)
8. Computer Experience and Use	0.262	0.005	1.166	(3, 480)	8. Computer Experience and Use	0.126	0.022	4.118***	(3, 480)
Information Model					Support Model				
1. Demographics	0.053	0.053	5.478***	(5, 494)	1. Demographics	0.057	0.057	6.023***	(5, 494)
2. Political Orientation	0.058	0.005	1.405	(2, 492)	2. Political Orientation	0.105	0.047	12.977***	(2, 492)
3. Discussion	0.059	0.001	0.506	(1, 491)	3. Discussion	0.105	0.000	0.000	(1, 491)
4. Traditional Media Use	0.120	0.061	34.215***	(1, 490)	4. Traditional Media Use	0.109	0.004	2.232	(1, 490)
5. Political Interest	0.225	0.105	16.435***	(4, 486)	5. Political Interest	0.109	0.000	0.043	(4, 486)
6. Psychological	0.225	0.000	0.064	(1, 485)	6. Psychological	0.110	0.001	0.310	(1, 485)
7. Media Perception/Reality	0.263	0.038	12.528***	(2, 483)	7. Media Perception/Reality	0.111	0.001	0.365	(2, 483)
8. Computer Experience and Use	0.316	0.053	12.318***	(3, 480)	8. Computer Experience and Use	0.136	0.025	4.579***	(3, 480)

Note: ΔR² = change in R²; ΔF = change in F.

* p<.10, ** p<.05, *** p<.01

Table 3
Iraq War Internet Visits, Opinion, and Effects for Supporters and Dissenters, March 2003

Item	Supporters (N=703)		Dissenters (N=199)		Difference	
	N	% ¹	N	% ¹	% ¹	t-statistic
Web Sites Visited						
U.S. government web sites	115	16.4	36	18.4	-2.0	-0.67
American television networks	239	34.1	72	36.9	-2.8	-0.73
American newspapers	198	28.3	86	43.4	-15.2	-4.09***
News organizations in other countries	73	10.4	31	15.7	-5.3	-2.07**
Groups that support war in Iraq	43	6.2	9	4.6	1.6	0.84
Groups that oppose war in Iraq	20	2.9	40	20.3	-17.5	-9.05***
Organizations thought of as sources of non-traditional news or alternative commentary	46	6.6	35	18.0	-11.4	-4.97***
Web logs or blogs posted by individuals about the war	21	3.0	14	7.1	-4.1	-2.62**
Importance of Online news, Information and Opinion about Iraq war²						
Up-to-the-minute news and information	449	64.4	121	62.4	2.0	0.53
News and information from a variety of sources	463	67.0	148	75.5	-8.5	-2.27**
Points of view that are different from traditional news sources	331	47.8	140	72.2	-24.4	-6.14***
Points of view that are different from official government sources	334	48.3	143	73.0	-24.6	-6.23***
Exchange emails or instant messages with others about the war	214	30.8	78	40.4	-9.7	-2.54**
Online Iraq War Effects³						
Internet has helped to keep up to date on war developments and Events	279	39.9	103	52.0	-12.2	-3.07**
Internet has helped to shape your views about the war	117	16.7	55	27.8	-11.1	-3.53**
Internet has helped to make your view about the war known to Others	124	17.7	52	26.4	-8.7	-2.72**

Note: ¹% rounded up if $\geq .5$

²Respondent said either "Very important" or "Somewhat important"

³Respondent said either "A lot" or "Somewhat"

** p<.05, *** p< .001

Table 4

Predicted Mean Dependent Variable Scores for Selected Types of Internet Users (N=500)

Type of Internet User	Activism		Information		Communication		Support	
	Predicted	(95% CI)	Predicted	(95% CI)	Predicted	(95% CI)	Predicted	(95% CI)
Average person	0.034	(-0.049, 0.118)	0.212	(0.132, 0.292)	0.113	(0.021, 0.206)	0.013	(-0.074, 0.010)
Supporter of war	-0.105	(-0.205, -0.005)	0.238	(0.142, 0.334)	0.083	(-0.028, 0.194)	0.083	(-0.021, 0.187)
Dissenter of war	0.505	(0.301, 0.709)	0.123	(-0.073, 0.319)	0.217	(-0.010, 0.443)	-0.225	(-0.437, -0.013)

Note: CI is confidence interval. All four dependent variables are derived from factor scores with mean approximately zero and standard deviation approximately one. The range of the predicted means for all four models is between -2 to +2. In addition, the values shown are the prediction of the mean given specific values for the independent variables. In the case of the average person, all individual variables are set to their mean. For supporter of war, opposing the war is set to “no” and all other independent variables are held at their average value. Likewise, for dissenter of war, opposing the war is “yes” and all other independent variables are set to their mean.

Table A1

Descriptive Statistics and Comparison t-tests for Demographics of Internet and Non-Internet Users, March 2003

Variable	Internet Users (N=929)		Non-Internet Users (N=561)		Difference	
	N	% ¹	N	% ¹	% ¹	t- statistic
Gender						
Female	428	46.1	282	50.3	-4.2	1.57
Male	501	53.9	279	49.7	4.2	-1.57
Race						
Non-Hispanic White	749	81.6	441	79.2	2.4	-1.14
African-American	54	5.9	52	9.3	-3.4	2.49**
Hispanic	71	7.7	42	7.5	0.2	-0.14
Other	44	4.8	22	4.0	0.8	-0.76
Age						
18-25	129	14.1	47	8.6	5.5	-3.16***
26-35	209	22.9	49	9.0	13.9	-6.87***
36-45	205	22.5	72	13.2	9.3	-4.42***
46-55	199	21.8	103	18.8	3.0	-1.36
56-65	120	13.2	101	18.5	-5.3	2.74**
66 and over	50	5.5	175	32.0	-26.5	14.51***
Education						
Less than HS	29	3.1	109	19.7	-16.6	11.02***
High School	237	25.6	254	45.9	-20.3	8.20***
Some College	232	25.1	101	18.3	6.8	-3.04***
College educated	427	46.2	89	16.1	30.1	-12.31***
Income						
<\$10k	17	2.1	55	13.3	-11.2	8.08***
\$10k to \$20k	40	4.9	78	18.8	-13.9	8.00***
\$20k to \$30k	75	9.3	85	20.5	-11.2	5.61***
\$30k to \$40k	98	12.1	53	12.8	-0.7	0.36
\$40k to \$50k	86	10.6	38	9.2	1.4	-0.78
\$50k to \$75k	202	24.9	41	9.9	15.0	-6.33***
\$75k to \$100k	141	17.4	32	7.7	9.7	-4.63***
>\$100k	152	18.7	32	7.7	11.0	-5.15***
Political Party						
Republican	321	36.6	159	31.2	5.4	2.05**
Democrat	259	29.5	202	39.6	-10.1	-3.86***
Independent	297	33.9	149	29.2	4.6	1.79**
Ideology						
Conservative	337	37.8	253	49.6	-11.8	-4.32***
Moderate	365	41.0	179	35.1	5.9	2.17**
Liberal	189	21.2	78	15.3	5.9	2.72**

Note: ** p<.05, *** p<.001 ¹% rounded up if ≥ .5

Table A2

Items on Political Opinion about the Iraq War, Traditional Media Use, Political Interest and Psychological Factors for All Internet Users and for Supporters and Dissenters, March 2003

Panel 1: Political Opinion About the War	All Respondents N=1495		Internet Users N=929		Internet Supporters and Dissenters					
	N	% ¹	N	% ¹	Supporters N=703		Dissenters N=199		Difference	
					N	% ¹	N	% ¹	% ¹	t- statistic
<i>Iraq War Sentiment</i>										
Approve George W. Bush as President	1029	73.3	649	73.0	629	92.1	15	7.8	84.3	38.36***
Approve George W. Bush dealing with Iraq	1086	77.4	687	77.0	662	95.8	18	9.5	86.3	46.92***
Made the right decision to use military force against Iraq	1092	77.4	681	76.2	659	96.1	15	7.8	88.3	50.88***
Military effort in Iraq is going well	1326	95.4	843	96.1	677	98.8	147	85.0	13.9	8.70***
<i>Political Orientation</i>										
Do you consider yourself a liberal?	267	19.0	189	21.2	79	11.7	104	53.6	-41.9	-13.91***
Do you oppose the war in Iraq?	324	22.7	199	22.1	0	0.0	199	100.0	—	—
<i>Discussion</i>										
First learn about the war by talking with others	88	6.0	54	6.1	40	5.7	14	7.2	-1.5	-0.75
Panel 2: Media Use										
<i>Iraq War Traditional Media Use</i>										
News mostly from TV, newspapers, radio and magazines	1287	87.7	745	81.6	568	82.2	153	78.5	3.7	1.18
Panel 3: Interest in Iraq War										
<i>Followed news about the war closely</i>										
Not at all closely	22	1.5	10	1.1	4	0.6	4	2.0	-1.4	-1.92**
Not too closely	86	5.8	35	3.8	23	3.3	9	4.6	-1.3	-0.85
Fairly closely	476	32.1	312	33.7	216	30.8	84	42.4	-11.6	-3.07***
Very closely	898	60.6	568	61.4	458	65.3	101	51.0	14.3	3.69***
I can't stop watching news about the war (TV coverage)	591	40.9	346	37.9	278	40.2	64	32.8	7.3	1.86**
Reading newspaper more closely? (Newspaper coverage)	446	29.9	277	30.0	193	27.6	78	39.2	-11.6	-3.16***
Using the Internet more (New media coverage)	154	10.3	134	14.4	97	13.8	36	18.1	-4.3	-1.50
Panel 4: Psychological Factors										
<i>Worry and Fear</i>										
Felt depressed by war	464	31.6	278	30.2	154	22.1	112	56.9	-1.4	-9.93***
Difficulty concentrating on job	209	14.1	136	14.7	75	10.7	53	27.0	-1.3	-5.88***
Trouble sleeping	137	9.2	83	9.0	47	6.7	30	15.2	-11.6	-3.78***
<i>Perception of Mass Media</i>										
Online important for different POV from traditional news sources	481	52.6	481	52.6	331	47.8	140	72.2	-24.4	-6.14***
Online provides different POV from newspapers and tv	166	22.3	166	22.3	97	17.5	62	36.5	-19.0	-5.32***

Note: * p<.10, ** p<.05, *** p<.01 ¹% rounded up if ≥ .5

Table A3

Computer Experience and Use and Iraq War Internet Activities of All Internet Users and Internet Supporters and Dissenters, March 2003

Panel 1: Internet Frequency of Use, Years of Online Experience, Type of Connection	All Internet Users (N=929)		Internet Supporters and Dissenters					
	N	% ¹	Supporters		Dissenters		Difference	
			N	% ¹	N	% ¹	% ¹	t- statistic
<i>Frequency of Use</i>								
Went online yesterday	549	59.2	422	60.2	117	58.8	1.4	0.36
<i>Years of Experience Online</i>								
Less than one year	21	2.3	18	2.6	1	0.5	2.1	1.78**
1-2 years	96	10.5	72	10.3	18	9.2	1.1	0.47
3-5 years	340	37.1	269	38.8	62	31.8	7.0	1.78**
6 or more years	459	50.1	335	48.3	114	58.5	-10.2	-2.52***
<i>Network Connection</i>								
Broadband connection	261	32.0	192	30.9	66	38.4	-7.5	-1.86**
Panel 2: Internet Information Behavior								
<i>Iraq War Communication Activities</i>								
Used e-mail to discuss the war with friends	184	19.8	124	17.7	57	28.6	-11.0	-3.43***
Used e-mail to discuss the war with members of your family	143	15.4	94	13.4	46	23.1	-9.7	-3.37***
Used email to communicate with an elected official About the war	59	6.4	26	3.7	31	15.6	-11.9	-6.20***
Used instant messaging to communicate with someone about the war	96	10.4	68	9.7	26	13.1	-3.4	-1.40
Received or sent patriotic material by e-mail	277	29.9	226	32.2	43	21.8	10.4	2.82**
Received or sent an email prayer requests	242	26.1	192	27.3	44	22.3	5.0	1.40
Received email news alert from a news organization or other Internet service	171	18.6	127	18.2	40	20.5	-2.3	-0.74
Received email from an organization clearly against the war.	103	11.3	46	6.7	56	28.7	-22.1	-8.87***
Received email from an organization clearly in favor of the war.	70	7.7	55	8.0	13	6.6	1.4	0.64
<i>Iraq War Information Activities</i>								
Look for news about the war in Iraq	426	45.9	321	45.7	97	48.7	-3.1	-0.77
Get information about the reaction of financial markets	240	25.9	187	26.6	51	25.8	0.9	0.25
Get information about the country and people of Iraq	150	16.2	98	14.0	50	25.3	-11.3	-3.81***
Look for information about how to prepare for a possible terrorist attack	84	9.1	62	8.8	19	9.6	-0.8	-0.33
Get information about how to get involved politically, including local rallies and demonstrations	59	6.4	19	2.7	40	20.2	-17.5	-9.19***
Read or posted comments about the war in an online group, a bulletin board, or a chat room	54	5.8	34	4.8	20	10.2	-5.3	-2.79***
Sign a petition online for or against the war in Iraq	64	6.9	28	4.0	36	18.1	-14.1	-7.00***

Note: * p<.10, ** p<.05, *** p<.01 ¹% rounded up if ≥ .5

Table A4. *Question Items and Respondent Answers for Measurement*

Political Ideology

In general, would you describe your **political views** as very conservative, conservative, moderate, liberal or very liberal?
(Answer = Liberal or very liberal)

Would you say that you support the war in Iraq or do you **oppose the war** in Iraq?
(Answer = Oppose the war)

Discussion Network

Thinking about **YESTERDAY/WEDNESDAY/(MARCH 19)**, how did you **FIRST** learn that the United States and others had launched an invasion of Iraq?
Was it from **talking with others**; listening to the radio; watching television; reading a newspaper; or going on-line over the Internet?
(Answer = Talking with others)

Traditional Media Use

How have you been getting **most of your news and information about the war** in Iraq...From television, from newspapers, from radio, from magazines, or from the Internet?
(Answer = Yes if respondent answered only the following: From television, from newspapers, from radio, or from magazines)

Political Interest

How closely have you been **following news about the war in Iraq** – very closely, fairly closely, not too closely, or not at all closely?
(Answer = 4 item index, 4=very closely)

I'd like to ask you a few questions about how you feel when you are **watching coverage of the war on TV**. For each statement that I read tell me if you strongly agree, agree, disagree or strongly disagree.
I can't stop watching news about the war
(Answer = Strongly agree or agree)

As a result of the war in the Iraq, ...
Are you **reading newspapers more closely**?
(Answer = Yes)

As a result of the war in the Iraq, ...
Are you **using the Internet more**?
(Answer = Yes)

Psychological (Additive 3 item index)

Have you yourself felt **depressed** by the war in Iraq?
(Answer = Yes)

Have you had any difficulty **concentrating on your job or your normal activities** because of the way you feel about the war in Iraq?
(Answer = Yes)

Have you had any **trouble sleeping** because of the way you feel about the war in Iraq?
(Answer = Yes)

Media Perception/Reality

When you are online for news, information and opinion about the war in Iraq, how **important is it that you can get points of view that are different from traditional news sources online**...Is it very important, somewhat important, not too important, or not at all important?

(Answer = Very important or somewhat important)

Thinking about everything you have read and seen online about the war in Iraq, would you say that the **information online provides information and points of view that are not available in newspapers and on TV** ...or is the information online pretty much the same as in the newspapers and on TV?

(Answer = Online is different)

Computer Experience and Use

Did you happen to **go online or check your email YESTERDAY**?

(Answer = Yes)

About how many **years have you had access to the Internet**?

(Answer = Under a year to 10 years or more)

Does the modem you use at home connect through a standard telephone line, or do you connect through a modem over a **D S L-enabled phone line; a cable TV modem; a wireless connection; or a T-1 or fiber optic connection**?

(Answer = DSL enabled phone line, cable modem, wireless connection, T1 or fiber connection)