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Health Orientation and Disease State as Predictors of Online Health Support Group Use

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Health Orientation and Disease State as Predictors of Online Health Support Group Use

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What are the antecedents to the usage of online health-based support groups? This article draws on the motivation literature to posit the role of disposition-specific and situation-specific motivations in shaping the use of online health support groups. Based on 2 different nationally representative studies, it examines the role of situation-specific and disposition-specific motivations as predictors of online health community participation. Study results point out that intrinsic health orientation is a positive predictor of participation in an online health community. In addition, disease-specific motivation in the realm of perceived susceptibility to a disease or being detected with a disease triggers online community participation in disease-specific groups. The study results provide theoretical and practical guidelines for future scholarship.

With the rapid growth of computer-mediated communication over the past 20 years, individuals can communicate at different levels through computer-mediated channels such as chat rooms, bulletin boards, and e-mail. Many health communication scholars have recognized that the Internet is a popular source of health information for people living with a variety of illnesses and conditions (e.g., Alexander, Peterson, & Hollingshead, 2003; Dutta-Bergman, 2003, 2004a & b; Kalichman, Benotsch, Weinhardt, Austin, & Luke, 2002; Preece, 1999; Wright, 2000). There are now more than 1 million health-related sites on the World Wide Web. A survey of Internet users found that growing numbers of users searched the World Wide Web for health information during recent years, and the number of virtual communities focused on health-related issues is growing at a rapid rate (United Press International, 1999).

Online self-help networks have provided new avenues of social support for patients (Turner, Grube, & Meyers, 2001). Camosy (1996) defines a support network as "a group of people devoted to promotion of proper diagnosis, treatment, and prevention of a specific condition, primarily through patient education and support" (p. 278). Virtual support communities are "groups of people with similar concerns who communicate via information technology" (Du-Pre, 2004, p. 182). These online communities often consist of smaller discussion groups where people can engage in communication about issues they are interested in. Members share common problems, assist each other toward mutual goals, and support each other through good and bad times.

The use of online self-help is an important development in providing support to a growing number of consumers with a variety of human services-related concerns. Ferguson (1996) listed more than 50 different online groups dealing with issues of health and disabilities. These groups share similar philosophy and intervention practices to face-to-face self-help groups but happen without the constraints of time and distance by using existing telecommunication networks. The number of articles dealing with online support communities has increased in recent years, examining the communicative functions of such communities. Much of this published literature has focused on analyses of communication content exchanged in such communities, attempting to decipher the functions from the communication threads. Although extant research has explored the patterns of online community usage, little research exists on the antecedents of online community participation in health contexts. In this article, we propose to examine the

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roles of disposition and situation-specific motivations as predictors of online community participation. In doing so, we seek to complement the content-analytic approach by exploring the underlying reasons that drive the use of online support groups. The motivation-based approach provides both a theoretical lens for interrogating online community usage, and a pragmatic lens for the development of online community services that meet the needs of user groups. A review of the literature on online health communities will be followed by the discussion of the motivation-based framework. Based on the motivation-driven framework, two studies will examine the role of motivation in online health community use.

ONLINE HEALTH COMMUNITIES

Existing research dealing with online support groups suggests that they may offer a number of advantages to their members compared to face-to-face support groups (Finn, 1999, 2000; Weinberg, Schmale, Uken, & Wessel, 1995; Wright, 2002). First, online communication allows greater freedom of space and time. Second, the anonymous nature of online communication provides an opportunity to communicate for people with face-to-face communication apprehensions or who feel uncomfortable in traditional formal group settings for a variety of reasons. Third, online support groups provide a ripe context for the development of hyperpersonal communication (Turner et al., 2001). Hyperpersonal communication depicts the type of online communication "that is more socially desirable than we tend to experience in parallel face-to-face interactions" (Walther, 1996, p. 17). Four characteristics of the mediated environment may contribute to hyperpersonal communication: (a) the idealized perception of the receiver, (b) the optimized self-presentation of the sender, (c) asynchronous channels supporting information management, and (d) a feedback loop allowing intensification magnified in minimal-cue interaction (Walther, 1996). Fourth, online communities have the ability to provide "weak tie" support (Adelman, Parks, & Albrecht, 1987). Weak-tie relationships exist outside the pressures and dynamics of close, family relationships and often are contextual in nature. In fact, some researchers suggest that the support offered by weak ties can provide anonymity and objectivity not found in close personal relationships, thus providing a helpful alternative for social support (Adelman et al., 1987; Wellman & Gulia, 1999).

In addition to the advantages of online support communication, disadvantages are also evident. First, some people may become addicted to Internet. Overdependence on technology-mediated communication may prevent individuals from developing relationships in their own communities, ultimately robbing them of the types of social support that cannot be transmitted via computer (Stoll, 1995; Turkle, 1996). Second, Internet information fraud and misinformation are problems. Third, relevant to social support, it may be much more difficult for people to convey emotional support in this context due to unique features of computer-mediated communication such as lack of nonverbal communication cues (Wright, 1999, 2002). Fourth, there are concerns about inaccessibility of computer resources and low proficiency using computer technology. The development of online resources is targeted to those with access and computer skills, leaving out the poor, undereducated, elderly, and other marginalized groups traditionally underserved by helping agencies (Glastonbury & LaMendola, 1992). Fifth, when a group is not monitored, the anonymous nature of online communication allows people to use languages and symbols they are not likely to use in face-to-face encounters (Galinski, Schopler, & Abell, 1997; Wright, 1999s).

In addition to documenting the advantages and disadvantages of online support group use, a great deal of current literature addresses the variety of support types in online health communities (Braithwaite, Waldron, & Finn, 1999; Finn, 1999, 2000; Wright, 2002). Braithwaite et al. (1999) explored the types of support in online communities by using Cutrona and Suhr's (1992) five supratypes. Wright (2002) used two types of support, emotional and informational, in his study but his study was not directed at exploring support types. Preece (1999) and Preece and Ghozati (2001) addressed one type of emotional support, empathy, in online support groups. The types of support presented in the published literature include information support, network support, esteem support, emotional support, and tangible support (Braithwaite et al., 1999; Holden, Bearison, Rode, Kapiloff, & Rosenberg, 2000). The studies conducted with online support groups have typically focused on the texts present on these groups, and therefore, do not really provide a picture of the user of such groups. However, according to a report published by the Pew Internet and American Life Project, online health community users are more likely to be women with higher levels of education and income.

In summary, the literature on online health support groups explores the different functions of the groups, advantages and disadvantages of group participation, and the communicative characteristics of support available online (Finn, 2000; Holden et al., 2000). In taking a medium-driven function of online health support groups, this body of published scholarship does not really take into account the variance within the population with respect to participation in online health support groups. In other words, the literature does not provide guidance regarding the motivations that drive online support groups or locate such motivations in the realm of within-population variances in online health community usage. In other words, how do the underlying motivations vary when online community participants are compared to nonparticipants? Tapping into the

motivation-based framework allows communication theorists to gain a better understanding of online community usage and the reasons underlying such usage (Finn, 2000; Holden et al., 2000). Also, the motivation-based approach puts the consumer at the center of application development, suggesting design guidelines for catering to existing consumers and communication strategies for attracting new consumers to online health support groups.

The motivation-based framework put forth in this study builds on the elaboration likelihood model (ELM) and suggests that intrinsic and extrinsic health motivations drive online health community use. More specifically, the ELM suggests that underlying motivation in an issue/topic is a key predictor of issue-relevant information processing (Petty & Cacioppo, 1986). In other words, the motivated consumer who is interested in a particular issue/topic is more likely to seek out communication channels relevant to that issue/topic as compared to the consumer who is not motivated in the issue/topic. In this article, we explore the role of motivation in the forms of health orientation and disease risk as predictors of online health support group usage. Study 1 explores the role of health orientation in the realm of online health community use, whereas Study 2 examines the predictive power of disease state in the realm of online health community use.

MOTIVATION

Motivation refers to the underlying interest in an issue/topic/content (Petty & Cacioppo, 1986). Motivation arises from the combination of dispositional and situational factors that underlie human behavior, and serves as an antecedent to patterns of consumer information processing. The ELM has been extensively used in the communication and psychology literatures to capture the role of motivation in audience information processing (Petty & Cacioppo, 1984, 1986, 1990). The ELM is particularly relevant as a theoretical framework because it directly connects the underlying motivation in a specific content domain and information-seeking strategies in that domain.

ELM

The ELM, primarily originating from psychology, articulates two distinct routes of information processing: central and peripheral (Petty & Cacioppo, 1984, 1986, 1990). When processing messages centrally because of the salience of the message or topic area, consumers attend to the arguments presented in the message, being persuaded by the quality of the arguments (Petty & Cacioppo, 1986). In such instances, strong arguments induce attitude change. Peripheral processing, however, involves decision-making based on heuristic or affective cues that are not directly relevant to the arguments about a topic/issue/product (Petty & Cacioppo, 1986). In such situations, the consumer searches for cognitively nonintensive cues for decision-making such as source attractiveness, price heuristics, and so forth.

ELM research documents that the decision-making route followed by the consumer is a function of his or her motivation to process the issue and his or her ability to process a message (Petty & Cacioppo, 1984, 1986, 1990). Motivation is reflected in the concept of involvement, referring to consumer interest in a topical area, product category, or issue. The involvement of the consumer in a topic or issue, in turn, depends on the relevance of the issue to the consumer's information processing needs. Whereas high levels of involvement lead to central processing, low involvement levels lead to peripheral processing. Therefore, consumers who are motivated in a particular issue are more likely to seek out information about the issue and process the central arguments present in that information as compared to individuals who are not motivated in the specific issue. A review of the literature on the ELM points out that motivation is both dispositional and situational. Some individuals are intrinsically interested in an issue (such as health news), whereas others become interested in the issue based on a situational trigger in their lives (such as being detected with cancer or a visit to the doctor's office where the doctor discusses the risks of cancer based on family history).

In summary, motivation is a key factor in the selection and processing of new communication technologies. Motivation not only influences the type of information processing strategy followed by the consumer, but it also taps into the amount of information search and the number of sources sought out by the consumer (Celsi & Olson, 1988; Dutta-Bergman, 2003, 2004a, 2004b). Scholars studying motivation have pointed out that motivation in an issue or product category triggers information seeking in that issue or product category. Highly motivated individuals not only search for a greater amount of information, but also look up a greater number of information resources. In this article, we theorize about the role of dispositional motivation (in the form of health orientation) and situation-specific motivation (in the form of disease state) in driving participation in online health communities. Study 1 examines the role of disposition-based motivation in the form of health orientation, and Study 2 examines disease-based motivation as an antecedent to online health community use.

STUDY 1: DISPOSITION-BASED MOTIVATION

Disposition-based motivation refers to the intrinsic consumer motivation in a topic or issue. This intrinsic motivation has been referred to as involvement in the ELM research (Celsi & Olson, 1988; Park & Mittal, 1985). For instance, intrinsic motivation in politics drives the search for political information (Petty & Cacioppo, 1986). Therefore, it may be argued that intrinsic motivation in health issues

would drive the use of health-related resources. Health orientation taps into this intrinsic health-based motivation.

Health Orientation

A key component in the explanation of health behaviors, health orientation refers to systematic differences within the population with respect to the level of motivation consumers feel regarding issues of health (Dutta-Bergman, 2004a, 2004b; MacInnis, Moorman, & Jaworski, 1991; Moorman & Matulich, 1993; Park & Mittal, 1985). Reflective of the degree of intrinsic interest consumers have in issues related to health, health orientation taps into the motivation component in the realm of health-related behaviors. It is an indicator of the consumer's overall interest in issues of health, and demonstrates the extent to which the consumer is intrinsically involved in health-related issues. It is important to note that health orientation is conceptualized as an intrinsic interest rather than an interest that is prompted by situational factors in the environment of the consumer, such as being diagnosed with a specific disease. The greater the intrinsic interest in health-related issues, the stronger the likelihood of engaging in a variety of health-related behaviors (MacInnis et al., 1991; Moorman & Matulich, 1993; Park & Mittal, 1985).

Motivation in health-related issues taps into the overall orientation toward health rather than serving as an indicator of one particular set of health behaviors. In their model of preventive health behaviors of consumers, Moorman and Matulich (1993) articulate that the motivation to be healthy is indicative of the extent to which an individual is willing to take care of his or her health, defining health orientation as "a goal-directed arousal to engage in preventive health behaviors" (Moorman & Matulich, 1993, p. 210). Therefore, health orientation triggers a wide variety of healthy behaviors that are intertwined by this commitment toward maintaining one's health, given the ability of the consumer to engage in these behaviors based on accessibility to resources, behavioral skills, self-efficacy, response efficacy, and so forth.

Published scholarship on consumer processing of information and subsequent decision making points out that motivation triggers an individual's intrinsic interest in a particular issue or topic, thus leading to active engagement in cognitions and behaviors related to the specific issue or topic (Petty & Cacioppo, 1986). In other words, motivation activates consumer engagement in information processing, decision making, and adoption of behavioral choices that are in line with the particular issue/topic being considered. A high level of motivation increases the attention paid by the individual to relevant information and the comprehension of such material. Extrapolation of motivation to the realm of health suggests that a health-motivated consumer actively participates in health-related issues and actively searches out relevant health information, provided that other factors—such as accessibility of resources, proper behavioral skills, and so forth—are present (Celsi & Olson, 1988; Dutta-Bergman, 2004a, 2004b; MacInnis et al., 1991; Moorman & Matulich, 1993; Park & Mittal, 1985). One of the critical aspects of the motivation-based model is its emphasis on the consumer's interest in health as a global construct instead of narrowing down on a certain aspect of health.

Online health support groups serve as health information resources that provide a venue for the exchange of health information and other communicative functions, such as social support, that are related to health issues. In other words, the existing literature points out that these groups serve as repositories of health information (Braithwaite et al., 1999). Information delivery and exchange is one of the key functions of online health communities (Finn, 1993, 1999). Therefore, the health oriented consumer is likely to use online health support groups, recognizing the potential of such groups to serve as sources of health information. The actively engaged consumer who is health information oriented searches for health information to fulfill his or her information needs, and therefore is likely to seek out a variety of resources that provide such information, including online health communities. The theoretical premise driving this research is that an overall orientation toward making healthy choices and being actively involved in issues of health manifests itself in a plethora of health behaviors, including participation in online health support communities. The two indicators of health orientation applied in this study are prevention orientation and health information orientation, and are drawn from past research (Moorman & Matulich, 1993). Specifically, the following hypotheses are proposed:

H1: Prevention orientation will positively predict participation in online health support groups.
H2: Health information orientation will positively predict participation in online health support groups.

Data and Measures

This study was based on secondary data available from the 2000 HealthStyles database. The HealthStyles database (Porter-Novelli, 1999), collected annually since 1995, is based on the results of three postal mail surveys. The initial survey, the DDB Needham Lifestyles survey (DDB Needham Worldwide, 1999), is sent to a stratified random sample of approximately 5,000 U.S. adults in April of each year. The sample is generated from a panel of 500,000 cooperating households that represent a range of sociodemographic characteristics. The second survey is a supplemental mailing of the Lifestyles survey to adjust the representation of particular households in the database. The third survey, HealthStyles, is sent to participants who completed either the initial or supplemental Lifestyles survey. Participants in each of the surveys are sent small gifts for their participation (such as a 20-min calling card) and are entered into a

cash prize drawing. In 2000 the response rates for Lifestyles and HealthStyles were 68% and 74%, respectively. The entire sample was weighted on age, sex, race or ethnicity, income, and household size to reflect the U.S. Census population. There were 2,353 participants who provided usable data. The sample was comprised of 48.1% men and 51.9% women. The mean age of the sample was 45.04 (SD = 16.63).

Online community. Participants were asked, "When looking for health information on the Web, which topics do you look for? ("X" all that apply)." Online community use was measured by the item, "discussion groups on health." Responses were measured on a dichotomous Yes/No scale.

Demographics. Age of the respondent was measured in number of years. Gender was measured by a dichotomous variable with 1 reflecting female and 2 reflecting male. Education was measured by the question, "What is the last grade or class you completed in school?" Responses were measured on a 7-point scale, with 1 representing "attended elementary school," 2 representing "graduated from elementary school," 3 representing "attended high school," 4 representing "graduated from high school," 5 representing "attended college," 6 representing "graduated from college," and 7 representing "post-graduate training." Income was measured on a 21-point scale in response to the question, with 1 representing "less than $5,000," and 21 representing "125,000 or more."

Health orientation. Health orientation was specifically measured in this project by (a) orientation toward preventive behaviors, and (b) health information orientation (see Dutta-Bergman, 2004b). The five items tapping into prevention orientation were borrowed from the existing literature (Dutta-Bergman, 2004a, 2004b): "Living life in the best possible health is important to me," "Eating right, exercising, and taking preventive measures will keep me healthy for life," "I try to understand my personal risks," "I actively try to prevent disease and illnesses," and "I do everything I can to stay healthy." The items were measured on a 5-point scale, with 1 reflecting "strongly disagree" and 5 reflecting "strongly agree." When subjected to a principal components factor analysis with Varimax rotation, a single factor was produced with factor loadings ranging from .66 to .76 and an Eigenvalue of 2.49. The Eigenvalue greater than 1 criterion was used for the identification of factors. Cronbach's alpha for the prevention orientation scale was .74.

Health information orientation was borrowed from the extant literature (Dutta-Bergman, 2003) and was measured by the following items: "I need to know about health issues so I can keep myself and my family healthy," "When I am sick, I try to get as much information as possible about my disease," "I make a point to read and watch stories about health," "To be and stay healthy, it is critical to be informed about health issues," "I really enjoy learning about health issues," "When I take medicine, I try to get as much information as possible about its benefits and side effects," "It is important to me to be informed about health issues," "I like to get health information from a variety of sources," and "Before making a decision about my health, I find out everything I can about the issue." The items were measured on a 5-point scale, with 1 reflecting "strongly disagree" and 5 reflecting "strongly agree." When subjected to a principal components factor analysis with Varimax rotation, a single factor was produced with factor loadings ranging from .64 to .78. The Eigenvalue of the factor was 4.24, and the Cronbach's alpha for the scale was .88. The criterion of Eigenvalue greater than 1.0 was used to identify factors.

Results

To test the hypotheses, a logistic regression analysis was conducted. The demographic variables were entered in the first block, and the health orientation variables were entered in the second block (see Table 1). Among the demographic variables, age was negatively related to online discussion group usage such that younger participants were more likely to look for online discussion groups on health as compared to older participants. No significant relationships were detected in the realms of education, income, and gender.

H1 stated that a prevention orientation would positively predict online discussion group usage. H1 was not supported, with no significant relationship between prevention orientation and online discussion group usage. According to H2, health information orientation will be positively related to online community participation. The results supported H2, with a positive relationship between health information orientation and online community use. In other words, health information oriented consumers were more likely to use online health communities as sources of health information as compared to those consumers who were less health information oriented. Study 1 documents the ways in which intrinsic interest in health-related issues triggers participation in online communities, thus demonstrating support for the motivation-based framework articulated in the ELM.

TABLE 1
Demographic and Health Orientation Predictors of Online Community Participation

Variable	*B*	*SE*	*Wald*	*df*	*Sig.*	*Exp(B)*
Age	−.039	.010	14.668	1	.000	.962
Income	.014	.026	.281	1	.596	1.014
Education	−.037	.131	.081	1	.776	.963
Gender	.475	.274	3.008	1	.083	1.608
Prevention orientation	−.091	.059	2.400	1	.121	.913
Information orientation	.175	.033	27.492	1	.000	1.191
Constant	−7.181	1.319	29.640	1	.000	.001

Note. SE = standard error; Sig. = significance.

However, motivation in a disease-specific topic may also be triggered by the detection of disease. In other words, patients who find themselves in a certain disease state are likely to seek out information relevant to that disease state. Study 2 examines online community use in the context of (a) the cancer-based identifier of the patient, and (b) his or her perceived susceptibility to cancer.

STUDY 2: DISEASE-BASED MOTIVATION

Motivation is not only dispositional, but may also be triggered by a specific situation (Petty & Cacioppo, 1984, 1986; Zaichowsky, 1985). Much of the literature on the ELM, for instance, explores ways in which the situation of the audience member cues him or her to process a message centrally (Petty & Cacioppo, 1986). ELM researchers build on the situational approach to examine consumer information processing strategies in high- and low-involvement situations (Petty & Cacioppo, 1986). In these studies, motivation is typically manipulated by orienting the consumer toward a particular issue or topic area. In other words, the situational environment is manipulated to create extrinsic motivation among the respondents toward a topical area. This extrinsic motivation is typically generated as consumers navigate through various situations in life (Zaichowsky, 1985). For instance, a consumer who is in the market for cars is more likely to pay attention to and process messages related to cars. Similarly, a patient in a specific disease condition is perhaps more likely to seek out information related to the disease and participate in health-based online groups. The situation of being diagnosed with a disease triggers active searching for information related to the disease. Online communities serve as repositories of health information and therefore, the state of being diagnosed with a disease is likely to trigger use of online communities to secure information and support related to the disease. Specifically in the realm of cancer-related online communities, the state of being diagnosed with cancer is likely to trigger information seeking related to cancer, including participation in online cancer communities. These online cancer communities become part of the information repertoire of the cancer patient. Hence, we hypothesize

H3: Cancer-based identifier of patients will be positively correlated with the use of online support groups.

In addition to the condition of actually being diagnosed with cancer, the perceived risk of the disease is also likely to trigger health information seeking (Petty & Cacioppo, 1986). Perceived susceptibility refers to the individual's perception of his or her risks with respect to the disease or illness. The published literature on prevention campaigns suggests that higher perceived susceptibility to disease or illness leads to greater information search, information processing of disease-related information through the central route, and the motivation to modify one's behavior to reduce the perceived threat. Therefore, it is hypothesized

H4: Perceived susceptibility to cancer will be positively correlated with the use of online support groups.

Data

The Health Information National Trends Survey (HINTS) was launched by the national Cancer Institute to gather data about information use patterns of cancer patients (see Nelson et al., 2004, for details). The nationally representative survey of adults 18 years and older was conducted in 2002–2003. Data collection began in October 2002 and was continued until April 2003. A total of 52,212 telephone numbers were randomly generated from exchanges throughout the United States, and were subject to a scrutiny by an independent directory service to remove business or nonworking numbers. Based on further filtering of the numbers, telephone interviewers were able to reach a total of 19,509 households. Interviews were conducted in the screening phase and the extended interview phase. A total response of 6,369 participants was used for this analysis. The sample was comprised of 48% men and 52% women. The mean age of the sample was 51.62.

Measures

Online community. Respondents were provided the following instruction, "Here are some ways people use the Internet. Some people have done these things, but other people have not. In the past 12 months, have you done the following things while using the Internet?" Online community participation was measured by the question, "Participated in an online support group for people with a similar health or medical issue?" Responses were measured on a dichotomous yes/no scale with 1 representing "Yes," and 2 representing "No."

Demographic variables. The demographic variables measured in the study were age, education, and gender. Age was measured by the question "What is your age?" Education was measured on a 6-point scale in response to the question "What is the last grade you completed?" Gender was measured by the dichotomous question "Are you male or female?" with 1 representing male and 2 representing female.

Cancer-based identifier. Participants were asked, "Ever been told you had cancer?" Responses were marked on a dichotomous scale with 1 representing "Yes," and 2 representing "No."

Perceived susceptibility. Respondents were asked "How often do you worry about getting cancer?" Responses were measured on a 4-point scale, with 1 representing "rarely or never," 2 representing "sometimes," 3 representing "often," and 4 representing "all the time."

Results

H3 predicted that cancer-based identifier of patients would be positively correlated with participation in cancer-related online support group. A logistic regression analysis was conducted to test the hypothesis (see Table 2). The results supported H3, pointing out that cancer patients were indeed more likely to use online health communities as compared to individuals who were not detected with cancer. In other words, the detection of the disease was more likely to lead to the participation in online forums.

Furthermore, H4 predicted that perceived susceptibility to cancer will be positively correlated with participation in online health support groups. To test H4, a logistic regression analysis was conducted (see Table 3). Demographic variables were entered in the first block, and perceived susceptibility to cancer was entered in the second block. The results supported H4, pointing out that perceived susceptibility was indeed a positive predictor of participation in an online disease community. Those who perceived that they were at greater risk of getting cancer were also more likely to use online health communities as compared to those who did not perceive themselves to be at risk of cancer.

In both Studies 1 and 2, it was observed that motivation is a key variable in use of the Internet for specific health functions. Study 1 pointed out that intrinsic interest in health positively predicted online health community use, after controlling for the effects of demographic variables. Study 2 further pointed out that extrinsic motivation predicts online health community use. In this particular instance, extrinsic motivation in the form of being diagnosed with cancer or perceiving oneself to be at risk of cancer was relevant to the use of online health support groups.

TABLE 2
Demographic and Disease-Specific Predictors of Disease-Specific Online Community Participation

Variable	*B*	*SE*	*Wald*	*df*	*P*	*Exp(B)*
Education	.003	.091	.001	1	.972	1.003
Age	.014	.006	4.892	1	.027	1.014
Gender	−.763	.191	16.037	1	.000	.466
Cancer	.841	.227	13.755	1	.000	2.318
Constant	2.289	.789	8.412	1	.004	9.862

Note. *SE*=standard error.

TABLE 3
Demographic and Disease-Specific Predictors of Disease-Specific Online Community Participation

Variable	*B*	*SE*	*Wald*	*df*	*P*	*Exp(B)*
Education	−.083	.103	.655	1	.418	.920
Age	.012	.007	2.887	1	.089	1.012
Gender	−.746	.209	12.760	1	.000	.474
Cancer worry	−.339	.088	14.749	1	.000	.712
Constant	5.018	.702	51.069	1	.000	151.072

Note. SE = standard error.

DISCUSSION

In recent years, an increasing number of consumers have turned to online support groups to seek information, share emotional support, and mobilize resources (Du-Pre, 2004). This exponential growth in the use of online support groups has been accompanied by the attention paid by communication scholars to the exploration of online health support groups (Braithwaite et al., 1999; Turner, et al., 2001). Much of this published literature has documented the advantages and disadvantages of these online support groups, the nature of social support provided in online health communities, and the communicative characteristics of the supportive exchanges in the online communities. However, absent in the literature is the exploration of the antecedents underlying the use of online health-based support groups. Who is the user of the online health communities and how does he or she differ from nonusers? This question taps into the within-population variance in uses of online health support groups, providing a framework for comparing users with users. Such comparisons are particularly relevant in the realm of consumer motivations that drive health-related uses of communication technologies. The exploration of the intrinsic and extrinsic motivations that drive online health community users will help develop a stronger theoretical approach to the study of online health communities and provide a basis for the design of strategic applications targeting online health support communities. It also fundamentally provides a basis for comparing users with nonusers within a theoretical framework.

To develop a profile of users of online health communities, this research borrowed from the published literature on motivation (Petty & Cacioppo, 1984, 1986). The ELM provides the theoretical basis for the central argument articulated in this study that motivation drives the search for information, including the use of resources that provide such information (Celsi & Olson, 1988; Dutta-Bergman, 2004a, 2004b). Identifying online health support groups as resources of health information, this article argues that motivation will positively predict online health community use. The two types of motivation that drive consumer information processing are typically classified into intrinsic and extrinsic motivations (Zaichowsky, 1985). Compared to other studies that have typically explored only one of these motivation types, this article examines the roles of both intrinsic and extrinsic health motivation in the realm of online health support group use. It argues that online health support groups are resources of health information, and therefore, are likely to serve the information needs of the motivated consumer. More specifically, it brings together the concepts of health orientation (intrinsic motivation) and

disease state (extrinsic motivation) to articulate that motivation will positively predict participation in online health communities. Whereas Study 1 examined the predictive power of health orientation as an intrinsic motivator, Study 2 examined the role of a cancer-specific disease condition as an extrinsic motivator.

In the realm of health orientation examined in Study 1, the hypothesis was based on the rationale that health orientation is a reflection of the individual's intrinsic motivation in health-related issues. Given the vast repository of health information available in online communities, it was articulated that the health oriented individual interested in issues of health will be more likely to seek out online health support groups. An analysis of the HealthStyles data demonstrated support for the hypothesis. Dispositional orientation toward health issues is indeed likely to propel the participation of individuals in online health communities.

In addition to exploring the role of health motivation, we examined the relationship between disease-specific indicators and participation in online health communities. To study the effect of disease-specific motivation, disease indicator and perceived susceptibility were introduced into the model. In the first logistic regression analysis based on the HINTS data, it was observed that the state of being diagnosed with cancer was a positive predictor of participation in an online health community. Also, perceived susceptibility to cancer was a positive predictor of participation in an online health community. In other words, situational factors such as being diagnosed with a disease or perceiving oneself to be at risk of a disease are also likely to trigger the search for health information resources, including online health support groups.

Overall, the results of the *two* studies point out the role of health-based motivation in determining a health-specific use of technology (online support groups). Motivation is a key *component* in determining the usage of a medium for specific functions. The role of motivation ought to be further explored in future research. For instance, motivation ought to be studied in the context of information processing styles on the Internet. How do varying motivations play out in the realm of the different information processing strategies that consumer use? For instance, how do health information searchers differ from the surfers on the Internet in their use of online health information? In this study, we explored the role of overall motivation in driving consumer use of online health communities. This may be complemented by future research that explores the different types of functions served by the online health communities and locates these functions in the realm of the underlying motivations. Uses and gratifications theory might provide a useful framework for further examining the role of motivation.

Users of online health support groups are intrinsically and/or extrinsically motivated in health issues. It is this motivation that drives the use of online health support groups as resources that contribute to the health of the individuals. Therefore, the processing of health information on such groups is likely to occur via the central route as opposed to the peripheral route. These findings suggest that developers of online health support groups ought to ensure that the support groups present high-quality information that is based on strong arguments. Attention needs to be paid to quality criteria such as completeness, relevance, and accuracy, given the highly involved nature of the users of this medium.

This study suffers from some limitations. First, the strong correlations between health orientation and online health support group participation might have been a product of common method bias, social desirability bias, or consistency bias. Future research ought to examine actual support group participation longitudinally and use other measures of health orientation beyond self-reports. The second study focused on cancer to investigate the role of disease-specific motivation in shaping online health community participation. Future scholarship needs to examine the roles of other disease types in the realm of online health community participation. In the studies, online health support group participation was measured by a single item. Furthermore, the measure was a self-reported indicator of online health support group participation. This raises questions about the validity and reliability of the data. Future efforts may complement the self-reported measures of the behavior with other indicators such as observations of participant involvement in online health support groups. Yet another possible research direction is the combination of participant observations and self-reports through studies done with members of online health support groups.

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