

ORIGINAL ARTICLE

Beyond Knowledge Gaps: Examining Socioeconomic Differences in Response to Cancer News

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This article tested a model, informed by the knowledge gap hypothesis, to predict information seeking about cancer immediately following news about the diagnosis or death from cancer of a national celebrity. I identified five celebrity news events and examined their impact using data from the 2005 Health Information National Trends Survey. News coverage about celebrity news events was more likely to promote information seeking among people with greater education than among those with less education. These differences were explained, at least in part, by the fact that highly educated people had greater health knowledge and community involvement than less-educated people. These factors may contribute to widening socioeconomic gaps in prevention behaviors. I suggest strategies to address these gaps.

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Within the U.S. population, there are large differences in knowledge about cancer and behavior that might prevent it. These differences are linked to socioeconomic status (SES)—that is, primarily income and education. Lower SES populations do not engage in risk-reducing health behaviors as often as higher SES populations (Lantz et al., 1998). Although a variety of factors place lower SES populations at higher risk for cancer—for example, occupational hazards, environmental pollution, and higher levels of stress—failure to engage in risk-reducing behaviors is one reason why lower SES populations are more likely to die from cancer (Lantz et al., 1998; Ward et al., 2004).

We also know that people of different SES respond differently to information about health in the news media. These different responses may explain how disparities in health knowledge and behaviors develop and widen over time (Tichenor, Donohue, & Olien, 1970; Viswanath & Finnegan, 1996). Not clearly understood, however, are the mechanisms driving differences in response to media messages. In this study, I test a model, informed by the knowledge gap hypothesis, to predict when people actively seek health information, beyond their routine use of the media

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or casual conversations. Focusing on major news events arising from the cancer diagnosis or death of national celebrities, I examine the cognitive and social mechanisms that might explain SES differences in response to health news.

News coverage and health behavior

News coverage of health issues has been linked to notable changes in a variety of health behaviors (e.g., Fan & Holway, 1994; Stryker, 2003; Yanovitzky & Blitz, 2000). Several studies also demonstrate the influence of news about national celebrities on people's health information seeking. Consider, for example, Magic Johnson's disclosure of his HIV status (Casey et al., 2003), Katie Couric's campaign for greater awareness of colorectal cancer (Cram et al., 2003), Nancy Reagan's breast cancer diagnosis (Lane, Plednak, & Burg, 1989), Ronald Reagan's colon cancer surgery (Brown & Potosky, 1990), and Kylie Minogue's breast cancer diagnosis (Chapman, McLeod, Wakefield, & Holding, 2005). These studies explored media effects on aggregate trends in health behavior and did not ask which segments of the population were influenced by health news. A clearer understanding of how socioeconomic disparities in health behavior develop, and of the role played by news media regarding health, should help public health officials develop better intervention strategies to reduce the disparities.

Knowledge gaps, information seeking, and differential effects of news coverage by SES

In examining SES disparities in information about health, this study makes use of the knowledge gap hypothesis. That hypothesis proposes that higher SES individuals tend to acquire information provided by news coverage at a faster rate than lower SES individuals (Tichenor et al., 1970). As a result, gaps in knowledge between higher and lower SES groups may increase over time (Viswanath & Finnegan, 1996). Health news is particularly vulnerable to knowledge gaps because of its frequent reference to technical language and its national rather than local focus (e.g., Donohue, Tichenor, & Olien, 1975; Viswanath & Finnegan, 1996). Even celebrity health events possess characteristics thought to increase gaps in knowledge, including large, short-term spikes in coverage rather than sustained news attention (Donohue et al., 1975) and the absence of conflict among opposing interest groups (Viswanath & Finnegan, 1996). Consistent with this assertion, Price and Zaller (1993) found that SES (education) was positively associated with knowing about Ronald Reagan's 1989 surgery to remove brain fluid buildup and a variety of other celebrity news events (e.g., trials involving Zsa Zsa Gabor and Jim Bakker).

There is mixed empirical evidence about whether knowledge about health, in and of itself, is a meaningful predictor of preventive behavior (see Viswanath, Breen, et al., 2006). If low-SES groups have less access to news sources, are less likely to retain information, or are less capable of acting upon news stories than high-SES groups, then health news may lead to SES disparities in other outcomes that are more strongly linked to preventive behavior (Viswanath & Emmons, 2006). For instance,

SES is strongly associated with information seeking, an outcome of interest to communication scholars (Afifi & Weiner, 2002; Brashers, Goldsmith & Hsieh, 2002).

What we know about information seeking makes it likely to be an important factor in understanding the relationship between health information in the media and subsequent health behavior. Theoretically, information seeking is closely linked to motivation, a concept central to current persuasion models (e.g., Eagly & Chaiken, 1993; Petty & Cacioppo, 1986). Because individuals who are motivated to seek out information are likely also to be motivated to scrutinize it carefully, information seeking should lead to the type of message processing that is linked to sustained persuasion and behavior change (Slater, 1997). Empirically, individuals who seek health information report that the information strongly influences their subsequent decisions about health behavior (e.g., Freimuth, Stein, & Kean, 1989; Niederdeppe et al., 2007). Those who seek health information are more likely to engage in preventive behavior and to take advantage of cancer screening tests (e.g., Rakowski et al., 1990; Shim, Kelly, & Hornik, 2006).

Combining insights from knowledge gap and information-seeking research, we may posit that differential levels of information seeking in response to health news are likely to lead to greater SES disparities in preventive and screening behavior. But we know little about the mechanisms that might generate these different levels of information seeking. This study builds on a variety of theoretical models to assess the cognitive and social mechanisms that explain SES differences in response to major news concerning a specific health event—the cancer diagnosis or death from cancer of a national celebrity in the United States (“celebrity cancer news events”).

Effects of celebrity cancer news events on information seeking: A working model

Numerous information-seeking models have been proposed, with several limited to particular domains such as the interpersonal, computer mediated, or cancer specific (e.g., Afifi & Weiner, 2004; Freimuth et al., 1989; Johnson, 1997; Ramirez, Walther, Burgoon, & Sunnafrank, 2002). Three models of information seeking regarding health and risk are particularly relevant to understanding when and how news coverage might influence individuals to seek information about cancer (Freimuth et al., 1989; Griffin, Dunwoody, & Neuwirth, 1999; Johnson, 1997). Building on the combined insights of the models and other relevant perspectives, I propose an integrative working model of the effects of news coverage about celebrity cancer events on information seeking (Figure 1). I describe model propositions and offer study hypotheses below.

Celebrity cancer news events as catalysts

News stories about celebrity cancer events possess characteristics that are thought to enhance message attention and processing: their role as exemplars (e.g., Zillman, 2006), the personalization of disease (e.g., Price & Czilli, 1996), and their narrative components (e.g., Green, 2006). Celebrity news events are thought of as “critical moments” through which public health advocates gain the attention, if only briefly,

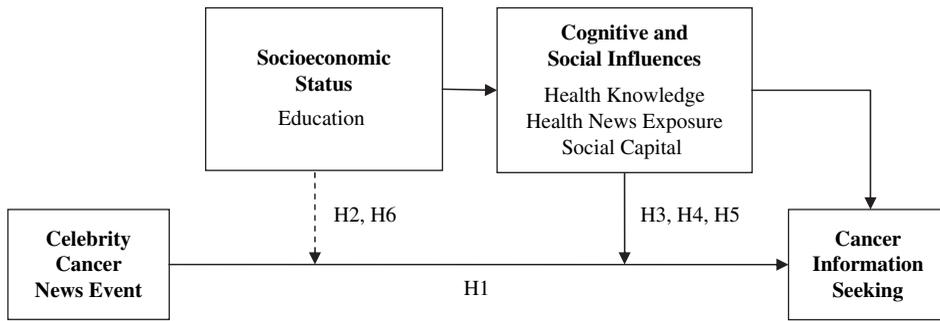


Figure 1 Working model of celebrity cancer news events and cancer information seeking.

of a large segment of the population (Pollack, 1994). Such events may direct attention to a health issue, generate subsequent coverage about that issue, increase knowledge about a disease, and promote behavior change (e.g., Brown & Potosky, 1990; Casey et al., 2003). In addition, these events are major catalysts for short-term spikes in information seeking (e.g., Freimuth et al., 1989). Thus, the study's first hypothesis (H1):

H1: Cancer information seeking will increase immediately after a celebrity cancer news event.

SES as moderator of the effects of celebrity cancer news events

Some have suggested that the relationship between news coverage and SES posited earlier arises because higher SES populations are more likely to seek information in response to health news (e.g., Viswanath & Finnegan, 1996). As described above, celebrity cancer news events possess characteristics hypothesized and found to increase gaps in news story recall and knowledge by SES (Donohue et al., 1975; Price & Zaller, 1993; Viswanath & Finnegan, 1996). Furthermore, studies consistently find that SES is a predictor of information seeking in response to a variety of stimuli, including personal disease diagnoses, onset of symptoms, and news coverage (Freimuth et al., 1989; see Johnson, 1997). I thus expect the effect of celebrity cancer news events on information seeking to be stronger among higher SES populations.

H2: The expected positive association between celebrity cancer news events and information seeking will be stronger among higher SES populations.

Previous studies of celebrity cancer news events have focused on effects of a single event. This study provides the opportunity to assess whether different characteristics of specific celebrities influence SES differences in response to these events. In the absence of a priori theoretical guidance expectations about particular celebrity characteristics that might enhance or minimize SES differences in response, I offer a research question:

RQ1: Does the relationship between celebrity cancer news events, SES, and information seeking differ depending on the celebrity involved in the cancer event?

Cognitive and social explanations for SES gaps in information seeking

Researchers have proposed a variety of possible explanations for SES gaps in information seeking (Johnson, 1997) and broader gaps in response to news (e.g., Donohue et al., 1975; Tichenor et al., 1970; Viswanath & Finnegan, 1996). Cognitive explanations include the suggestion that high-SES individuals (a) know more about specific topics and (b) have greater exposure to news. Better-informed individuals can more easily incorporate new information than those who know little or nothing about a subject (e.g., Price & Zaller, 1993). Those who regularly read or watch the news are more likely to seek further information about what they see or hear (Dutta-Bergman, 2005). Health knowledge and health media exposure are included as important predictors in models of health information seeking (Griffin et al., 1999; Johnson, 1997). Combining insights from knowledge gap and information-seeking research, I expect individuals with high health knowledge to have a greater likelihood of responding to a particular stimulus, a celebrity cancer news event, by seeking information relative to those with less health knowledge.

H3: The expected positive association between celebrity cancer news events and information seeking will be stronger as health knowledge increases.

Likewise, I expect those with greater health news exposure to be more likely to respond to celebrity cancer news events by seeking information, relative to those with lower exposure.

H4: The expected positive association between celebrity cancer news events and information seeking will be stronger as exposure to health news increases.

Sociological approaches to mass communication suggest that high-SES individuals may also have greater social capital, which provides opportunities to hear about and seek information about news events (e.g., DeFleur, 1987; Katz & Lazarsfeld, 1955). Social capital (also called “social integration”) refers to the degree to which an individual has social ties in various contexts, including affiliations with community organizations (see Putnam, 2000). Discussions with friends or associates in community organizations provide socially integrated individuals with greater opportunities to seek information about health (e.g., Dutta-Bergman, 2005; Gaziano, 1997; Granovetter, 1973; Johnson, 1997). I thus expect those with greater social capital to be more likely to respond to news coverage about a celebrity cancer news event by seeking information, relative to those with lower social capital.

H5: The expected positive association between celebrity cancer news events and information seeking will be stronger as social capital increases.

Higher SES groups tend to have greater health knowledge, exposure to health news, and social capital than lower SES groups (Viswanath & Finnegan, 1996; Viswanath,

Steele, & Finnegan, 2006; Viswanath, Breen, et al., 2006). These findings suggest that differences in health knowledge, health media exposure, and social capital may explain why differential levels of information seeking in response to celebrity cancer news events would be observed by SES. In other words, differences in the effects of cognitive and social factors on information seeking in response to celebrity cancer news events should mediate differences in the effects of celebrity cancer news events on information seeking by SES. Stated formally, I posit:

H6: SES differences in the effects of celebrity cancer news events on information seeking will be reduced in magnitude when accounting for the effects of health knowledge, health media exposure, and social capital on information seeking in response to celebrity cancer news events.

Methods

Study hypotheses were addressed by merging the 2005 Health Information National Trends Survey (HINTS 2005) with news coverage data from the LexisNexis database.

Identification of celebrity cancer news events

The LexisNexis database was used to identify celebrity cancer news events covered by the Associated Press (AP) wire during the HINTS 2005 observation period (February 21, 2005, to August 14, 2005). The AP is a wire service that is used by more than 85% of U.S. newspapers and is a reasonable proxy for broader media coverage of news topics (Fan, 1988). A validated search term to automate the retrieval of relevant articles about cancer was applied to the HINTS 2005 observation period (including 1 week before the first interview, from February 21, 2005, to August 14, 2005); the search yielded a total of 277 articles (Niederdeppe, 2006; Stryker, Wray, Hornik, & Yanovitzky, 2006).

I began by reviewing strategies used by the AP to catalogue celebrity cancer news events that were found in previous studies to promote health information seeking, including Magic Johnson's HIV status disclosure, Katie Couric's colon cancer screening campaign, Nancy Reagan's breast cancer surgery, Ronald Reagan's colon cancer surgery, and Kylie Minogue's breast cancer diagnosis (Brown & Potosky, 1990; Casey et al., 2003; Chapman et al., 2005; Cram et al., 2003; Lane et al., 1989). Based on this review, I defined celebrity cancer news events reported by the AP during the observation period as follows: (a) the story mentioned an individual's name in the headline, (b) the individual was diagnosed with, or died from, cancer during the observation period and (c) was deemed sufficiently famous to need no descriptor beyond the name in the headline (e.g., "Peter Jennings," not "Pop singer Anastacia" or "UConn coach Calhoun"), and (d) the story was catalogued by the AP as a "Domestic," "Washington Dateline," or "Entertainment" news story. Five events met these criteria: (a) Arlen Specter's diagnosis with Hodgkin's disease, referenced in a "Washington Dateline" headline on February 16, 2005; (b) Peter Jennings's lung

cancer diagnosis, referenced in two “Entertainment News” headlines on April 5, 2005; (c) Kylie Minogue’s breast cancer diagnosis, referenced in a single “Entertainment News” headline on May 17, 2005; (d) Peter Jennings’s death from lung cancer, referenced in two “Domestic News” headlines on August 8, 2005; and (e) Dana Reeve’s lung cancer diagnosis, referenced in two “Domestic News” headlines on August 9, 2005. These events were characterized by large, immediate, and short-lived spikes in cancer news coverage within the top 50 newspapers and broadcast television news programs (Niederdeppe, 2006).

HINTS 2005 data collection procedures

HINTS 2005, conducted by the National Cancer Institute (NCI), was a representative, national, random-digit-dialing telephone survey of American adults aged 18 and older. The survey achieved a 20.8% response rate for a final sample of 5,585 respondents. The unweighted sample contained more women (65.5%, $n = 3,656$) than men, with a mean age of 52.17 years (range = 18–96, $SD = 17.88$). Most participants without missing values described themselves as Caucasian (79.5%, $n = 4,279$), 8.6% self-identified as African American ($n = 460$), 9.3% as Hispanic ($n = 496$), and 2.2% as another race ($n = 119$). To account for oversampling of racial and ethnic minorities and differences in the study’s age, gender, and education distribution compared to other national estimates, all study analyses were conducted with replicate weights and jackknife standard errors using STATA’s “svy jackknife” command.¹ Distribution estimates in the remainder of this section use weighted percentages.

Dependent variable: Cancer information seeking in the past week

HINTS 2005 asked respondents: “Have you ever looked for information about cancer from any source?” Participants who said yes were asked: “About how long ago was that?” Individuals who sought information within a week prior to the date of their interview were classified as past-week information seekers (4.6%, $n = 313$).

Independent variable: Celebrity cancer news events in the past week

Independent time-series analyses testing the relationship between celebrity cancer news events and the volume of calls to the Cancer Information Service suggested that cancer information seeking was most likely to occur immediately following news coverage about the five celebrity cancer events (Niederdeppe, 2006). To match the timing of the dependent variable, an indicator variable was used to identify people interviewed within a week of a celebrity event (8.3%, $n = 469$). I also created three variables to assess possible differences in response to specific celebrities. Because Dana Reeve’s diagnosis occurred the day after Peter Jennings’s death, I was unable to separate these two events. I thus created a single variable that included those interviewed within a week of Jennings’s diagnosis, Jennings’s death, or Reeve’s diagnosis. I created an additional variable for Kylie Minogue’s diagnosis. The percentage of the sample interviewed within 1 week of these events (or group of events) is presented in Table 1. There were an insufficient number of observations ($n = 62$)

Table 1 Weighted Variable Distributions and Bivariate Associations with Information Seeking

	Weighted %	<i>n</i> in Category	Weighted % Seeking Within Category	<i>n</i> Seeking Within Category
No celebrity cancer news event in the past week	91.71	5,116	4.51	278
Celebrity cancer news event in the past week	8.29	469	5.29	35
Jennings or Reeve cancer event in the past week	2.78	136	5.41	9
Kylie Minogue cancer event in the past week	4.31	271	5.63	20
No personal cancer experience	88.69	4,706	4.17	224
Personally had cancer	11.31	873	7.80	89
No family cancer experience	28.55	1,502	3.09	69
Family member had cancer	71.45	4,054	5.18	243
Less than high school diploma	13.88	687	2.95	23
High school diploma or equivalent	28.60	1,447	2.57	49
Some college or trade school	30.76	1,544	6.33	113
College degree or greater	26.77	1,908	5.56	128
Low health knowledge (0 or 1 of 5 correct)	24.79	1,203	2.16	36
Mid-low health knowledge (2 of 5 correct)	26.25	1,376	3.70	70
Mid-high health knowledge (3 of 5 correct)	24.02	1,368	5.17	80
High health knowledge (4 or 5 of 5 correct)	21.83	1,481	8.12	125
Infrequent print health news exposure	64.69	3,200	2.92	105
Frequent print health news exposure	35.31	2,368	7.64	208
Infrequent local television health news exposure	54.20	2,820	3.84	114
Frequent local television health news exposure	45.80	2,760	5.46	199
Infrequent Internet health news exposure	74.23	4,202	3.17	186
Frequent Internet health news exposure	25.77	1,381	8.63	127
Low community participation (1 or fewer groups)	87.76	4,528	4.17	235
High community participation (2 or more groups)	12.24	857	8.08	73

in the week following Arlen Specter's cancer diagnosis (February 16, 2005) to permit analyses specific to this event because HINTS 2005 data collection did not begin until 5 days later (February 21, 2005). Thus, only those interviewed on February 21 or 22 were contacted within a week of Specter's diagnosis.

Variables related to moderating hypotheses

Years of education

Education was used as a single indicator of SES.² Eleven response categories were provided for the question: "What is the highest level of school you completed?" Responses were transformed into numerical values that reflected either the midpoint of each category (e.g., Grades 9 through 12 assigned a value of 10.5) or the number of years typically required to obtain a degree (e.g., bachelor's degree assigned a value of 16). The mean value was 13.33 (range 3–20, $SD = 2.88$; Table 1). For illustrative purposes, I also split the education variable into four quartiles, as follows: less than a high school diploma, high school diploma or equivalent, some college or trade school, and college degree or greater (Table 1).

Health knowledge

An additive health knowledge index was composed of five survey items asking about (a) the recommended number of fruit and vegetable servings per day (open-ended response was recorded verbatim by the interviewer; five or greater coded as correct), (b) the relationship between exercise and cancer (closed-ended response categories; increases or makes no difference coded as incorrect, lowers cancer risk coded as correct), (c) awareness of colon cancer screening tests (open-ended response was recorded verbatim by the interviewer; any test recognized by name coded as correct), (d) the recommended frequency and duration of physical activity (open-ended response was recorded verbatim by the interviewer; 4+ days a week for 30+ minutes coded as correct), and (e) whether low-carbohydrate diets are a healthy way to lose weight (closed-ended response categories; yes or do not know coded as incorrect, no coded as correct).³ These items were weakly correlated (average $r = .11$). On average, respondents answered 2.48 of five questions correctly (range = 0–5; $SD = 1.31$).

Cronbach's alpha was not used to assess index reliability because there was no expectation that knowledge items would be strongly associated with one another. An individual could be very well informed about physical activity but know nothing about cancer screening tests and would still be considered to have some health knowledge. To assess the validity of index items, I used association with family cancer history as a nomological validation criterion (Bollen & Lennox, 1991). One would expect those with family cancer history to be more knowledgeable about cancer preventive behaviors (e.g., diet, physical activity) and screening tests (e.g., colonoscopy) than those without a family cancer history because of elevated risk. Respondents with a family cancer history were more likely to answer each question correctly ($p < .05$, chi-square test), providing evidence that the knowledge index

items were valid. For illustrative purposes, I also split the knowledge index into four quartiles (Table 1): low knowledge (0 or 1 correct), mid-low knowledge (2 correct), mid-high knowledge (3 correct), and high knowledge (4 or 5 correct).

Exposure to health media

HINTS 2005 asked about exposure to three sources of health news: (a) print, (b) local television, and (c) the Internet. First, respondents were asked: "In the past 12 months, have you . . . [read health sections of a newspaper or of a general magazine; watched health segments on the local news; read unsolicited health information on the Internet]?" Respondents who answered yes were asked: "About how often have you . . . [read such health sections; watched health segments on local news; read this sort of information] in the past 12 months: once or more per week, or less than once per week?" Responses were used to create dichotomous variables for frequent (once or more per week) versus nonfrequent (less than once per week) exposure to health news from each source. More than a third of respondents (35.3%, $n = 2,368$) reported frequent exposure to print health news, 45.8% ($n = 2,760$) reported frequent exposure to local television health news, and 25.8% ($n = 1,381$) reported frequent exposure to health news on the Internet (Table 1). Health news exposure between the three sources (print, local TV, and Internet) were only weakly correlated ($r_{ab} = .25$; $r_{ac} = .15$; $r_{bc} = .02$), so the moderating role of each variable was examined separately.

Social capital

HINTS 2005 asked respondents about a single component of social capital: community participation. Community participation was assessed by asking: "How many community organizations are you currently a member of?" (*minimum* = 0, *maximum* = 16). Preliminary, bivariate logistic regression analyses indicated that community participation was nonlinear in association with information seeking, such that increased odds of information seeking were only apparent for those who participated in two or more groups. Because a linear variable would not capture such nonlinear effects, I created a dichotomous community participation variable that distinguished between respondents with two or more memberships (12.2%, $n = 857$) and those with one or fewer.

Control variables

Previous studies identify a variety of demographic factors that are associated with cancer information seeking. Several authors note, however, that demographics are often weak or nonsignificant predictors of information seeking when considered alongside cognitive and social factors (e.g., Dervin, 1989; Price & Zaller, 1993). Rather than controlling for an exhaustive list of demographics, I included two factors consistently associated with information seeking: personal cancer history and family cancer history. Individuals with cancer history (through a personal or family member diagnosis) are much more likely to seek cancer information than those without such history (e.g., Freimuth et al., 1989; Johnson, 1997).

Personal cancer history was assessed as follows: “Have you ever been told by a doctor that you had cancer?” Individuals who said yes (11.3%, $n = 873$) were considered to have a personal cancer history. Family cancer history was also assessed using a single item asking: “Have any of your family members ever had cancer?” Individuals who said yes (71.5%, $n = 4,054$) were coded as having a family cancer history. Although the models described in the pages below did not include a variety of other factors that some studies have found to predict health information seeking (e.g., age, gender, race/ethnicity), subsequent analyses (not shown) accounting for these factors did not alter results pertaining to any of the study’s six hypotheses.

Analytic approach

I used a series of multiple logistic regression models to test study hypotheses. Logistic regression is an appropriate analytic method when the dependent variable is dichotomous. The method uses maximum likelihood estimation to predict group membership (past-week information seeking or not) as a function of continuous and/or categorical independent variables. Logistic regression makes no assumptions about the distribution of the dichotomous variable, so the method is appropriate for analyses using outcomes with unbalanced distributions (Allison, 1999). Results are presented in terms of odds ratios (ORs). ORs greater than one represent positive relationships, whereas ORs less than one represent negative relationships. An OR of 1.10 would mean that a one-unit change in a dependent variable is associated with a 10% increase in the odds of seeking cancer information in the past week.

A multiple logistic regression model, controlling for cancer history and education, was used to estimate the odds that a respondent sought information about cancer in the past week if a celebrity cancer news event occurred in that week compared to weeks without a celebrity cancer news event (H1). Results from this model are depicted in Table 2, Model 1. An OR for celebrity cancer news events that was statistically different from one would be considered evidence in support of H1. A second multiple logistic regression model including an interaction term between education and celebrity cancer news events was used to assess whether education moderated the relationship between celebrity cancer news events and information seeking (H2). Results from this model are shown in Table 2, Model 2. An interaction with an OR statistically greater than one would be considered evidence in support of H2.⁴ I examined RQ1 with the same analytic procedure I used to test H2, but I substituted the overall celebrity cancer news event variable with two specific celebrity cancer news event variables: Jennings/Reeve and Kylie Minogue.

To examine H3, H4, and H5, I estimated a series of multiple logistic regression models that included centered interaction terms between each proposed moderator and celebrity cancer news events. These models excluded education but controlled for cancer history. An interaction with an OR greater than one for Health Knowledge \times Event (H3), any of the three indicators of Health News Exposure \times Event (H4), or Community Participation \times Event (H5) were considered evidence in support of

Table 2 Multiple Logistic Regression Models Testing Variables Associated with Cancer Information Seeking in the Past Week

	Model 1—Celebrity News Cancer Event	Model 2—Event × Education	Model 3—Event × Social and Cognitive Influences	Model 4—Event × Education and Social/Cognitive Influences
Celebrity cancer news event in the past week	1.05 (0.63–1.75)	0.81 (0.45–1.45)	0.65 (0.32–1.33)	0.62 (0.31–1.25)
Personally had cancer	1.87*** (1.18–2.97)	1.86*** (1.18–2.95)	1.78* (1.10–2.89)	1.80* (1.11–2.92)
Family member had cancer	1.57* (1.10–2.25)	1.57* (1.09–2.25)	1.48* (1.01–2.18)	1.44 (0.98–2.10)
Years of education (range 3–20)	1.13*** (1.07–1.19)	1.11** (1.04–1.18)	—	1.05 (0.99–1.12)
Health knowledge index (range 0–5)	—	—	1.38** (1.15–1.66)	1.34** (1.10–1.62)
High community participation (2 or more groups)	—	—	1.39 (0.92–2.10)	1.31 (0.86–1.99)
Years of education (centered) × Celebrity cancer news event	—	1.21* (1.02–1.43)	—	1.10 (0.93–1.31)
Health knowledge (centered) × Celebrity cancer news event	—	—	1.61* (1.09–2.39)	1.41 (0.94–2.12)
Community participation × Celebrity cancer news event	—	—	3.93* (1.04–14.85)	2.09 (0.59–7.45)
Number of observations	5,326	5,326	5,347	5,326

Note: Cells contain adjusted odds ratio estimates and 95% confidence intervals. Analyses used replicate weights and jackknife standard error estimates. Interaction terms involving health media exposure (print, local television, and Internet) were not statistically significant in preliminary models and were thus removed from the results depicted in Models 3 and 4.

*Denotes odds ratios significantly different from one at $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$.

these hypotheses. Results from a model that included each significant interaction term and their component main effects are shown in Table 2, Model 3.

There are currently no statistical methods available to test whether moderating effects are explained by multiple mediators in a logistic regression framework (Mueller, Judd, & Yzerbyt, 2005). As a result, I was unable to directly test the study's final hypothesis using traditional statistical methods (H6). Instead, I estimated a comprehensive multiple logistic regression model, including celebrity cancer news events, cancer history, education, health knowledge, community participation, and each interaction that was significant in previous models, to examine the extent to which the moderating influence of education was reduced in magnitude when accounting for the main effects of cognitive and social factors and their interactions with celebrity cancer news events (see Table 2, Model 4). To support H6, I expected the moderating influence of education to become nonsignificant and reduced in magnitude when accounting for the main effects of cognitive and social factors and their respective interactions with the celebrity cancer news event variable. I also conducted a series of additional analyses to clarify whether the main effects of cognitive factors, the main effects of social factors, or their respective interactions with celebrity cancer news events were responsible for any observed reductions in the moderating influence of education. These analyses consisted of a series of logistic regression models to determine the extent to which the interaction term involving education and celebrity cancer news events was reduced when controlling for each main effect (in isolation) and/or each interaction involving cognitive and social variables.

Results

Overall effects of celebrity cancer news events

H1 was not supported. The odds of information seeking were higher within a week of celebrity cancer news events but far from statistically significant (OR = 1.05, $p > .05$; Table 2, Model 1).

SES as moderator of the effects of celebrity cancer news events

H2 was supported. The relationship between celebrity cancer news events and information seeking was substantially stronger among higher SES respondents, those with higher levels of education (interaction OR = 1.21, $p < .05$; Table 2, Model 2). To gain a clearer understanding of the interaction, logistic regression model parameter estimates were used to predict cancer information seeking by education and celebrity cancer news events (Figure 2). Although the model included years of education as a continuous variable, for illustrative purposes, I plot results using four quartiles of education (less than a high school degree, high school degree or equivalent, some college, and college degree or higher). A positive relationship between celebrity cancer news events and information seeking was apparent only among respondents with a college degree. According to the model, these individuals were more than

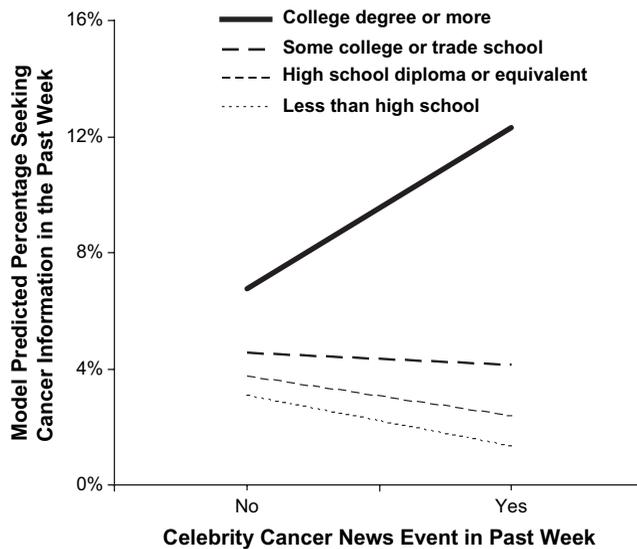


Figure 2 Model predicted relationship between celebrity cancer news events and cancer information seeking in the past week by education in quartiles ($n = 5,326$).

twice as likely to seek information following a celebrity cancer news event (12.3%) than during periods without such events (6.7%). Among respondents with less education, relationships between celebrity cancer news events and information seeking were generally flat.

Tests of RQ1 revealed differences in the magnitude, but not direction, of effects as a function of the specific celebrities involved in the cancer news event. The interaction between events involving Peter Jennings/Dana Reeve and education on information seeking was positive and statistically significant ($OR = 1.61, p < .001$), indicating that highly educated people were more likely to respond to these news events by seeking cancer information relative to less-educated people. The interaction involving education and Kylie Minogue's diagnosis ($OR = 1.12, p > .05$) was positive but not statistically significant.

Cognitive and social explanations for SES gaps in information seeking

H3 was supported. The relationship between celebrity cancer news events and information seeking was substantially stronger among individuals with higher levels of health knowledge (interaction $OR = 1.61, p < .05$; Table 2, Model 3). The form of this interaction is conveyed in Figure 3. A positive association between celebrity cancer news events and information seeking was apparent only among respondents in the highest quartile of health knowledge. H4 was not supported. Interactions involving exposure to health news in print media, on local television, or via the Internet were not statistically significant ($p > .05$ for all interaction ORs; not presented in tables). H5 was supported. The interaction between community

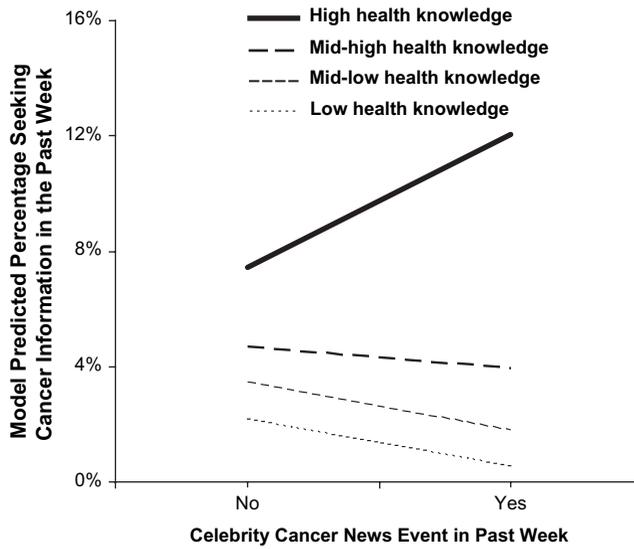


Figure 3 Model predicted relationship between celebrity cancer news events and cancer information seeking in the past week by health knowledge in quartiles ($n = 5,347$).

participation and celebrity cancer news events on cancer information seeking was statistically significant ($OR = 3.93, p < .05$; Table 2, Model 3). The form of this interaction is conveyed in Figure 4. A positive relationship between celebrity cancer news events and information seeking was apparent only among those who participated in two or more community organizations.

H6 was supported. The significant moderating effect of SES (operationalized as education) on the relationship between celebrity cancer news events and information seeking (Table 2, Model 2) was reduced in magnitude by more than half and became nonsignificant (from $OR = 1.21, p < .05$ to $OR = 1.10, p > .05$) when accounting for the main effects of health knowledge and community participation and their respective interactions with the celebrity cancer news event variable (Table 2, Model 4). Additional analyses (not presented in tables) indicated that both interactions, but not the main effects, were responsible for the observed reduction in the moderating influence of education. The moderating effect of education was unchanged when accounting for the main effects of health knowledge only ($OR = 1.21, p < .05$) or the main effects of both health knowledge and community participation ($OR = 1.20, p < .05$). The moderating effect of education was reduced when adding the interaction between health knowledge and celebrity events ($OR = 1.15, p > .05$) and reduced even further when the interaction between community participation and celebrity events was added ($OR = 1.10, p > .05$). These results suggest that the moderating effects of both health knowledge and community participation, independently, partially explain the moderating effect of education on the relationship between celebrity cancer news events and cancer information seeking.

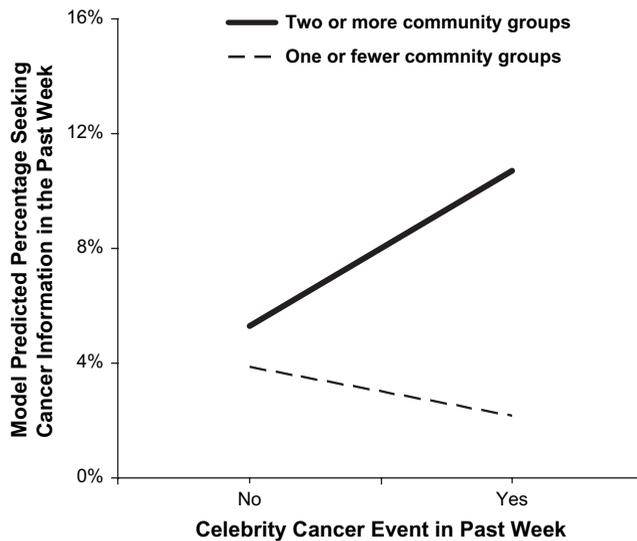


Figure 4 Model predicted relationship between celebrity cancer news events and cancer information seeking in the past week by community participation ($n = 5,347$).

Discussion

This study provides general support for a model of cognitive and social mechanisms to explain, at least in part, SES differences in response to health news. Although celebrity cancer news events did not lead to higher levels of information seeking among the overall population (contrary to H1), they did produce greater information seeking among certain subgroups. There was substantial evidence that SES differences produced gaps in response to celebrity cancer news events (supporting H2). In addition, those with high health knowledge and community participation were more likely than those with lower knowledge and community participation to seek information in response to celebrity cancer news events (supporting H3 and H5). Those with greater health news exposure were not more likely than those with less exposure to seek information in response to these events (contrary to H4). The moderating effect of SES on the relationship between celebrity cancer news events and information seeking was reduced, but not eliminated, when accounting for the moderating effects of health knowledge and community participation (supporting H6). Therefore, health knowledge and community participation appear to explain, at least in part, why differential levels of information seeking in response to celebrity cancer news events were observed by SES. High-SES individuals tend to have higher levels of health knowledge and community participation, and these cognitive and social factors influence whether or not a person responds to a celebrity cancer news event by seeking information.

These findings build on existing research about the effects of health news on behavior, information seeking, and the knowledge gap hypothesis. Although some

suggest that celebrity health news events represent critical moments when large segments of the population can be motivated to learn more about health issues and engage in behaviors to prevent them (Pollack, 1994), the results in this article suggest that celebrity cancer news events appear to have influenced only those with a college degree. This finding is consistent with expectations derived from the knowledge gap hypothesis (e.g., Tichenor et al., 1970; Viswanath & Finnegan, 1996) and previous data showing SES differences in knowledge about celebrity news events (Price & Zaller, 1993). Thus, even news about cancer episodes among national celebrities may increase the disparities in health knowledge and behavior between higher and lower SES populations.

At first glance, different celebrity cancer news events appear more or less likely to promote SES gaps in short-term response. The fact that a significant interaction was observed specifically for Peter Jennings's lung cancer diagnosis and death and Dana Reeve's lung cancer diagnosis, but not for Kylie Minogue's breast cancer diagnosis, suggests that the SES differences observed during the observation period are largely attributable to Jennings's and Reeve's events. There are several possible explanations for this finding. The fact that Jennings's death and Reeve's diagnosis occurred on consecutive days makes it impossible to isolate the effects of each event. It is possible that SES differences in response to these events are attributable to the nature of these celebrities (Jennings being a newscaster, Dana Reeve as an actor's wife and fundraiser for spinal cord injury), the fact that both suffered from lung cancer (vs. other types of cancer), or the fact that the combination of two events produced larger spikes in coverage than are observed with a single celebrity. Consistent with the latter explanation, a separate analysis of cancer news volume during 2005 period revealed that the largest spike in print coverage occurred immediately after Peter Jennings's diagnosis, whereas the largest spike in broadcast TV coverage occurred immediately after Jennings's death and Reeve's diagnosis (Niederdeppe, 2006).

It is also worth noting that, although nonsignificant, positive coefficients for the interaction involving SES and Kylie Minogue's cancer event suggest that this event was not able to promote greater information seeking among low-SES populations. Future research should continue to explore responses to cancer news to identify characteristics that minimize SES differences in response. It is clear from these results, however, that celebrity cancer news events have potential to increase gaps in information between high- and low-SES populations.

The working model of the effects of celebrity cancer news events on information seeking was based on insights from various models of information seeking and from research testing the knowledge gap hypothesis in other contexts. The model appears to characterize differential levels of information seeking in response to one type of stimulus, a celebrity cancer news event. It is also possible that the model may explain differential responses of SES groups to other information-seeking stimuli, such as media campaigns, a personal cancer diagnosis, the diagnosis of a close friend or family member, or the onset of cancer symptoms. Future work might explore moderators of the relationship between other types of stimuli and information seeking.

Beyond knowledge gaps

The knowledge gap hypothesis has focused attention on the idea that SES groups acquire different amounts of knowledge from media sources (e.g., Viswanath & Finnegan, 1996). Although there is only mixed evidence that health knowledge alone is a powerful predictor of preventive behavior, differential response to health news among SES groups may lead to disparities in other outcomes linked to preventive behavior (Viswanath & Emmons, 2006). Efforts to seek supplementary information may be a particularly important behavioral response to celebrity cancer news events and other cancer news (e.g., Niederdeppe et al., 2007).

A small but notable proportion of participants did, in fact, respond to celebrity cancer news events by seeking additional information, but those individuals were characterized by very high levels of SES in the form of a college education. Conversely, the vast majority of respondents did not respond to celebrity cancer news events by seeking additional information. Collectively, these findings raise the concern that differences in preventive behavior between high- and low-SES populations may widen. They also raise questions about how lower SES populations make sense of major cancer news stories. In addition, the results provide one explanation for SES gaps that have been observed for some cancer preventive behaviors. To address these concerns, public health advocates and medical practitioners likely need to make continued efforts to disseminate information about cancer prevention, screening, and treatment to lower SES populations.

The findings illuminate two mechanisms through which SES differences in response to news coverage might be addressed. One mechanism is by increasing health knowledge: individuals with a higher level of prior knowledge can more easily incorporate new information in response to news stories (see, e.g., Price & Czilli, 1996; Price & Zaller, 1993). For such people, celebrity cancer news events may represent a catalyst for further information seeking. Efforts to promote health literacy may be particularly important in helping lower SES populations make sense of public information about cancer (e.g., Institute of Medicine, 2004). To the extent that health literacy and health knowledge are intertwined, increased health literacy among low-SES populations could produce greater information seeking in response to relevant stimuli; this, in turn, could increase the likelihood of engaging in preventive behaviors.

Community participation represents a second mechanism through which SES may lead to different responses to celebrity cancer news events. Individuals who participate in a variety of community organizations have greater opportunities to hear about health news stories and have more resources from which to seek additional information than individuals who do not participate. Social context is an important predictor of health behavior and mediator or moderator of media effects (see Viswanath & Emmons, 2006). Active efforts to promote social capital in communities may help low-SES populations gain access to resources from which to seek health information (e.g., Putnam, 2000; Thorson & Beaudoin, 2004).

Alternate models of media effects

To conclude from these results that news coverage has little effect on health behavior would run counter to several studies showing meaningful and large news effects on a variety of health behaviors, as earlier noted. The integrative working model of media effects applied in this research project tested short-run effects (within a week) on information seeking about a topic about which most people already have a good deal of general awareness. It thus may not be surprising that only high-SES populations, individuals with high health knowledge, and people with many community resources are interested enough in celebrity cancer news events to respond by seeking information. This short-run model of media effects may only apply to a small subset of the population. Furthermore, even short-run effects might be different if novel types of health information were considered. The pattern of information seeking about a new disease (e.g., SARS, bird flu) might take a different trajectory and lead to a different conclusion about the magnitude of media effects.

There are alternate models of media effects that may operate within other segments of the population. News coverage of health issues may have longer term, cumulative effects on people's health knowledge or behavior. It may take weeks or months of repeated exposure to health news about a particular topic to influence some individuals. Celebrity cancer news events may also change the amount and nature of news coverage about a public health issue. Indeed, Peter Jennings's lung cancer death prompted ABC news to run a month-long series on smoking and cancer, which in turn may have helped low-SES populations to quit smoking. Furthermore, cumulative health news effects may occur indirectly by promoting broader changes in social norms about health or by changing policies that affect people's behavior (e.g., Hornik, 2002; Stryker, 2003). Neither of these mechanisms would require individuals to seek information in response to news stories but could influence their behavior nonetheless. This study's focus on short-run effects on information seeking would not capture such long-run effects.

These issues do not discredit the short-run model of the effects of celebrity cancer news events on information seeking but remind us that alternate models of media effects may apply to other segments of the population in other contexts. The short-run model may have important consequences but should not be interpreted as an overall test of news coverage effects nor should its results lead us to conclude that news media coverage is inconsequential.

Study limitations

The study's independent variable represents an indirect measure of media exposure. It is impossible to know whether or not respondents actually read, saw, or heard about each celebrity cancer news event. However, the indirect approach also has notable advantages. First, indirect exposure measures are not subject to selectivity biases inherent to self-report recall measures (Slater, 2004). The fact that news coverage measures are independent of survey responses eliminates the possibility

that alternate, third variables (e.g., selectivity, better memory, greater interest in news) account for associations between exposure and information seeking. Furthermore, the reverse causal pathway is highly unlikely in this scenario because it is implausible that information seeking would cause a celebrity to have a cancer diagnosis or death. As a result, the observed association between celebrity cancer news events and information seeking likely represents a cause–effect relationship, a conclusion that could not be drawn using self-reported news exposure. Second, individuals do not necessarily have to read or watch a news story to hear about it. Celebrity cancer news events might stimulate interpersonal conversation between those who saw the news item and those who did not, as evidenced by the fact that community participation was a key moderator of the relationship between celebrity cancer news events and information seeking. As a result, the use of self-reported exposure measures may miss important indirect effects that celebrity cancer news event measures can detect.

At the same time, the method used to link celebrity cancer news events to cancer information seeking is subject to measurement error. Specifically, based on the timing of the independent (cancer news events occurring in the past week) and dependent variable (information seeking in the past week), it is possible that some respondents who were classified as having been exposed to a celebrity cancer news event, and as having sought information in the past week, actually sought the information prior to the news event. For instance, a respondent who was interviewed 2 days after Peter Jennings's lung cancer diagnosis could have sought information 6 days earlier but would have been classified as an exposed information seeker. This measurement error would have the effect of adding noise to estimates of the effects of celebrity cancer news events on information seeking, which would bias results toward the null hypothesis. The fact that the study was able to detect interactions between celebrity cancer news events and several hypothesized moderators on information seeking is particularly compelling in this context. While the use of a shorter time frame for information seeking (e.g., past 3 days) would have reduced this type of error, these reductions would have been offset by substantial decreases in statistical power to detect effects because so few respondents sought information within a few days of their interview. The use of indirect measures of news exposure involves a trade off between precision (e.g., not knowing who was exposed; ambiguity in timing) and causal inference (e.g., reducing the possibility of selection as a confounding interpretation).

We were unable to provide a definitive statistical test of the hypothesis that social and cognitive factors would explain SES differences in response to celebrity cancer news events. The fact that the coefficient for the interaction term involving SES and news events was reduced in magnitude by more than half and became nonsignificant when accounting for health knowledge and community participation suggests that these factors at least partially explain the observed relationships. The interaction term OR was not reduced to one, however, suggesting that other factors may also explain the moderating effect of SES.

HINTS 2005 data are also subject to limitations. The low response rate (20.8%) raises questions about how well the sample represents the U.S. population. It is unknown whether there are meaningful differences in sociodemographic characteristics, information seeking, or the magnitude of association between these variables between HINTS respondents and those who chose not to participate. In addition, only a small proportion of the sample engaged in past-week information seeking, and the majority of respondents were involved in one or zero community organizations. Data collection spanned only 6 months, reducing the number of celebrity cancer news events that might have occurred over a longer time period. Each of these considerations reduces the likelihood of detecting a main effect or an interaction involving social capital. The fact that interaction effects were detected among three subpopulations might be viewed as compelling evidence in this context.

The health news exposure measures are also subject to limitations. Whereas the print and Internet health news exposure measures likely capture exposure to local and national news, the local television news exposure measure probably did not capture exposure to nationally broadcast news programs like ABC's *Nightly News* or CBS' *Evening News*. This is particularly important because Peter Jennings was the host of ABC's *Nightly News* prior to his cancer diagnosis. It is possible that the lack of significant interactions between health news exposure and celebrity cancer news events is attributable to this measurement omission. Future work should test the effect of health news exposure in response to other celebrity cancer news events.

Furthermore, reliance on self-reported information seeking as the study's outcome does not establish the nature of the health outcomes resulting from that seeking behavior. Although cross-sectional data do not permit a causal claim, individuals who report cancer information seeking in the HINTS 2003 data are also more knowledgeable about cancer and are more likely to have engaged in cancer screening behaviors (Shim et al., 2006). However, this measure is too limited to do more than hint at the implications of celebrity news events for population health.

Conclusions

This study provides evidence in support of an integrative model of differential news effects by SES on information seeking. Results suggest that high-SES populations are more likely to respond to celebrity cancer news events by seeking information, a result explained in part by high levels of health knowledge and greater community participation among high-SES populations. Collectively, results provide one explanation for widening socioeconomic gaps in behavior aimed at preventing cancer. Future research might assess the model's utility in predicting responses to alternate information-seeking stimuli (e.g., symptoms, diagnoses, campaigns, other types of news coverage) and outcomes (preventive or screening behaviors).

Acknowledgments

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Notes

- 1 A thorough review of replicate weights and jackknife standard errors is beyond the scope of this article, but readers are invited to read Korn and Graubard (1999) for more information about these techniques. In summary, replicate weights involve deleting a random proportion of subjects (in this case, 1/50th) and reweighting those cases based on more comprehensive estimates of the distribution of race, age, and gender in the population (in this case, from the U.S. Census and Current Population Survey). This procedure is repeated 50 times to create 50 independent data sets, from which the variances and standard errors of significance tests can be estimated. This procedure is available in STATA and SUDAAN but not currently available in standard SAS and SPSS data analysis packages.
- 2 Income is also commonly used as an indicator of SES. However, there were a large number of respondents who declined to report their incomes in the HINTS 2005 survey (1,092, 19.6% of the sample), and income was not associated with information seeking among nonmissing cases. In light of these considerations, I used education as a single indicator of SES.
- 3 Although the scientific evidence about low-carbohydrate diets is still uncertain, most cancer organizations either do not make firm recommendations about their use (NCI) or have issued statements advising against them (American Cancer Society and American Institute for Cancer Research). Thus, at best, there is insufficient evidence to conclude that low-carbohydrate diets are a healthy way to lose weight.
- 4 Although $-2 \log$ likelihood chi-square tests for nested models represent a more formal test of whether the interactions improve model fit, the test is not available when using jackknife standard error estimates of logistic regression coefficients.

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Au-delà des écarts de savoirs : Un examen des différences socioéconomiques dans la réponse aux actualités liées au cancer

Jeff Niederdeppe

Résumé

Cette recherche a testé un modèle, inspiré de l'hypothèse de l'écart des savoirs, pour prédire la recherche d'informations à propos du cancer immédiatement après l'annonce du diagnostic ou de la mort due au cancer d'une célébrité nationale. J'ai identifié cinq événements d'actualité liés à des célébrités et j'ai examiné leur impact grâce à des données tirées du Health Information National Trends Survey (« sondage des tendances nationales dans l'information sur la santé ») de 2005. La couverture de presse des événements médiatiques liés aux célébrités était plus susceptible de promouvoir la recherche d'informations chez les gens plus éduqués que chez les gens moins éduqués. Ces différences étaient expliquées, au moins en partie, par le fait que les gens plus éduqués avaient une plus grande connaissance de la santé et une plus grande implication dans leur communauté que les gens moins éduqués. Ces facteurs peuvent contribuer à élargir les écarts socioéconomiques dans les comportements de prévention. Je suggère des stratégies afin d'aborder ces écarts.

Jenseits von Wissensklüften: Die Untersuchung von sozioökonomischen Unterschieden bei der Reaktion auf Krebsnachrichten

In diesem Artikel teste ich ein Modell basierend auf der Wissensklufthypothese, welches vorhersagt, dass Informationssuche über Krebs unmittelbar auf die Nachricht über die Diagnose oder den Krebstod einer nationalen Prominenten folgt. Ich habe fünf Nachrichtereignisse zu Prominenten identifiziert und ihren Einfluss mit Daten der Health Information National Trends-Umfrage von 2005 untersucht. Die Nachrichtenberichterstattung über Nachrichtereignisse zu Prominenten erhöhte die Wahrscheinlichkeit der Informationssuche bei Menschen mit höherer formaler Bildung im Vergleich zu solchen mit niedriger formaler Bildung. Diese Unterschiede konnten, zumindest teilweise, durch die Tatsache erklärt werden, dass höher gebildete Personen über mehr Gesundheitswissen verfügen und stärker in ihr Umfeld involviert sind als weniger gebildete Menschen. Diese Faktoren tragen zu einer Vergrößerung von sozioökonomischen Klüften bezüglich des Vorsorgeverhaltens bei. Ich schlage deshalb Strategien vor, diesen Klüften zu begegnen.

**Más Allá de la Brecha de Conocimiento: Examinando las Diferencias
Socioeconómicas en la Respuesta a las Noticias sobre el Cáncer**

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Resumen

Este artículo puso a prueba un modelo, informado por la hipótesis de la brecha de conocimiento, para predecir la búsqueda de información sobre el cáncer inmediatamente después de la noticia del diagnóstico ó la muerte por cáncer de una celebridad nacional. Identifiqué 5 noticias de eventos de celebridades y examiné su impacto usando los datos de una encuesta sobre las Tendencias Nacionales de Información de Salud del 2005. La cobertura de noticias sobre los eventos de celebridades fue, más probablemente, para promocionar la búsqueda de información entre las personas más educadas que entre aquellas menos educadas. Las diferencias son explicadas, al menos en parte, por el hecho de que las personas más educadas tenían mayor conocimiento sobre la salud y mayor involucramiento en la comunidad que aquellas personas menos educadas. Estos factores pueden contribuir a la ampliación de las brechas socioeconómicas en los comportamientos de prevención. Sugiero estrategias para tratar esas brechas.

超越知识沟：

社会经济层面的差异对癌症新闻的反应

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本文检测了一个由知识沟假设发展而来的模式，来预测阅读全国性名人癌症之诊断或因癌症死亡的新闻之后立即进行的搜寻癌症信息的情况。利用2005年健康信息全国趋势调查的数据，我选定了5个名人新闻事件，并检验了他们所产生的影响。关于名人新闻事件的报道更有可能促进教育水平高的人，而不是教育水平低的人，的信息搜寻活动。这些差异至少部分可用如下事实解释，即教育水平高的人比教育水平低的人有更多的健康知识和社区参与。这些因素可能造成在预防行为方面社会经济鸿沟的进一步拉大。针对这些鸿沟，我提出了解决的策略。

지식격차를 넘어서: 암 보도에 대한 반응에 있어 사회경제적인 차이점에 대한 연구

Jeff Niederdeppe

요약

본 연구는 지식격차가설에 근거하여, 국가적 유명인사의 암 진단과 이에 따른 사망에 대한 뉴스 직후 암에 관한 정보추구를 예측하기 위한 모델을 시험한 것이다. 본 연구는 5가지 저명인사에 대한 뉴스보도를 확인했으며, '2005년 건강정보 국가적추세보도'로부터 데이터를 이용해 그들의 영향을 시험한 것이다. 저명인사 뉴스에 관한 뉴스 보도는 교육수준이 낮은 사람들보다 교육수준이 훨씬 높은 사람들 사이에서 정보추구를 증진할 가능성이 높은 것으로 나타났다. 이러한 차이들은 높은 수준의 교육을 받은 사람들은 그렇지 못한 사람들보다 더 좋은 정도의 건강지식과 커뮤니티 활동이 크다는 사실에 근거하여 적어도 부분적으로 설명되어왔다. 이러한 요소들은 예방행위들에 대한 사회경제적 격차를 더욱 확대하는데 기여할 지 모르는 것이다. 이러한 격차를 설명하기 위한 전략들을 제안했다.