

ORIGINAL ARTICLE

Does Local Television News Coverage Cultivate Fatalistic Beliefs About Cancer Prevention?

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Many U.S. adults hold fatalistic beliefs about cancer prevention despite evidence that a large proportion of cancer deaths are preventable. We report findings from two studies that assess the plausibility of the claim that local television (TV) news cultivates fatalistic beliefs about cancer prevention. Study 1 features a content analysis of an October 2002 national sample of local TV and newspaper coverage about cancer. Study 2 describes an analysis of the 2005 Annenberg National Health Communication Survey (ANHCS). Overall, findings are consistent with the claim that local TV news coverage may promote fatalistic beliefs about cancer prevention. We conclude with a discussion of study implications for cultivation theory and the knowledge gap hypothesis and suggest foci for future research.

doi:10.1111/j.1460-2466.2009.01474.x

Approximately 30% of U.S. cancer deaths are attributable to smoking, whereas 14–20% are attributable to overweight and obesity (Calle, Rodriguez, Walker-Thurmond, & Thun, 2003; Peto, Lopez, Boreham, Thun, & Heath, 1994). Although these data suggest that nearly half of all cancer cases are preventable, several studies document widespread fatalistic beliefs about cancer prevention (e.g., Slenker & Spreitzer, 1988). These beliefs are characterized by pessimism, helplessness, and confusion and ambiguity about ways to avoid getting cancer. Nearly half of U.S. adults agree that “It seems like almost everything causes cancer” (pessimism), more than a quarter agree that “There’s not much people can do to lower their chances of getting cancer” (helplessness), and almost three in four agree that “There are so many recommendations about preventing cancer, it’s hard to know which ones to follow” (confusion and ambiguity; AUTHOR, 2007). People who agree with at least

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one of these statements are less likely than those who disagree to engage in a variety of behaviors that reduce cancer risk, and lower levels of formal education are linked to higher odds of agreement with all three fatalistic beliefs about cancer prevention (Han, Moser, & Klein, 2007; Niederdeppe & Levy, 2007).

The sheer volume of news coverage about cancer causes and prevention has led to broad speculation about its role in promoting fatalistic beliefs (Aldeman & Verbrugge, 2000; Russell, 1999; Taubes, 1995). To date, however, little evidence has been brought to bear on these assertions. We do know that there is no shortage of news coverage about cancer (Aldeman & Verbrugge, 2000; Viswanath *et al.*, 2006), and journalistic norms may highlight a particular type of coverage that can be detrimental. News stories often call attention to new cancer risks at the expense of well-established causes, overemphasize new research findings, and omit follow-up information (FI) or details about what can be done to reduce cancer risk (Russell, 1999; Taubes, 1995). Over time, cumulative exposure to stories that highlight new cancer causes and research findings may lead to fatalistic beliefs about cancer prevention. Despite these assertions, few studies have systematically explored whether higher levels of exposure to cancer news coverage are associated with these beliefs. Moreover, scholars have not examined the effects of different sources or channels of cancer news despite good reason to suspect that local television (TV) coverage may be particularly harmful. Cultivation and knowledge gap research provide useful theoretical frameworks with which to test the relationship between local TV news viewing and beliefs about cancer prevention, with attention to possible differences by education. Building on these traditions, we summarize results from a content analysis of cancer coverage in local TV broadcasts and newspapers (Study 1) and an analysis of data from a large national survey (Study 2) to assess the plausibility of the claim that local TV cancer news coverage cultivates fatalistic beliefs about cancer prevention.

Cultivation theory and content-specific extensions

Cultivation theory posits that habitual exposure to TV influences beliefs about the general nature of the world (Gerbner, Gross, Morgan, & Signorielli, 1980). People who are heavily exposed to TV are more likely than those with less exposure to adhere to TV's version of social reality (Gerbner, Gross, Morgan, Signorielli, & Shanahan, 2002). In general, most studies find a small but significant association between TV viewing and beliefs about a variety of topics, including crime, gender roles, and political views (Shanahan & Morgan, 1999).

Cultivation analysis refers to the research methodology typically applied in cultivation studies. While a few studies have focused on TV portrayals of doctors and health (Chory-Assad & Tamborini, 2003; Gerbner, Gross, Morgan, & Signorielli, 1982), cultivation analysis has been applied most frequently to the topic of TV violence and perceptions of the degree of violence in the world (Gerbner *et al.*, 1980). Cultivation analysis has two primary components: (a) content analysis to identify overarching patterns of TV content (e.g., incidence of TV violence), and (b) survey

data analysis to assess associations between TV viewing and, in the case of TV violence, perceptions of real-world crime. Perceptions of crime are also often compared to local crime rates in violence-related cultivation analyses (Hetsroni & Tukachinsky, 2006).

While Gerbner and colleagues (2002) acknowledged that different types of programs, genres, or channels are likely to have different types of short-term effects on audiences, they also articulate their belief that all TV programs contribute to “massive, long-term, and common exposure of large and heterogeneous publics to centrally produced, mass-distributed, and repetitive systems of stories” (p. 47). Nevertheless, several authors have focused on the specific cultivation effects of TV news broadcasts (Gross & Aday, 2003; Lowry, Nio, & Leitner, 2003; Romer, Jamieson, & Aday, 2003). Most of these analyses found significant associations between TV news exposure and crime perceptions. For instance, Romer et al. (2003) found that local TV news viewing increased fear of crime and concern about violence. Lowry et al. (2003) found that network TV news coverage of a 1994-crime scare accounted for most of an unprecedented increase, between 1992 and 1994, in perceptions of crime as the most important problem facing the United States. Likewise, Gross and Aday (2003) found that local TV news increased the view that crime was the most important problem facing the Washington, DC area, although they found no association between local TV news and personal fear of crime victimization.

Recent extensions of cultivation theory, with a focus on differences between media source content and audience, are particularly relevant to understanding sources of fatalistic beliefs about cancer prevention. More U.S. Americans report getting information from local TV news than any other news source including national network newscasts, cable outlets, TV news magazines (such as *Dateline* or *60 Minutes*), national and local newspapers, talk radio, and the internet (Fowler, Goldstein, Hale, & Kaplan, 2007; Pew Center for the People and the Press, 2006). Furthermore, in part because of the focus on mass ratings rather than the affluent, educated demographics sought by newspapers (Kaniss, 1991), local TV news reaches a systematically different audience than many other news sources (Fowler, Goldstein, & Shah, 2008). In comparison with regular news consumers of national or print sources who tend to be older, more educated, and more knowledgeable than most of the population, habitual local TV news viewers (54% of the American public) tend to look more like the average American (Pew Center for the People and the Press, 2006). In other words, local TV messages are not only viewed by more individuals but they also reach a socioeconomically diverse audience.

In light of the scope and breadth of their audience, local TV news stories have the potential to be very influential. Studies of local TV coverage of crime, politics, and health, however, have typically concluded that its content suffers from sensationalism and frequently contains little substance (Fowler et al., 2007; Gilliam & Iyengar, 2000; Pribble et al., 2006). Although these studies suggest that local TV coverage of cancer may be detrimental, the specific role of local TV news in shaping beliefs about cancer prevention has not been addressed. Recent

content analyses of cancer news have not differentiated between local and national TV (Slater, Long, Bettinghaus, & Reineke, 2008), have focused exclusively on print (Stryker, Emmons, & Viswanath, 2007), or have examined only a small set of local TV media markets without making comparisons with other types of media (Wang & Gantz, 2007). In light of differences in the audience of local TV relative to print (Potter & Kurpius, 2000) and intense competitive pressure in the broadcast news arena that may lead to further differences in content (Zaller, 1999), greater attention should be paid to how both local TV and newspaper coverage may contribute to fatalistic beliefs about cancer prevention.

Hypotheses related to cultivation theory

To this end, we offer three hypotheses about local TV cancer news content relative to local newspapers and a fourth hypothesis about the relationship between local TV news viewing and fatalistic beliefs about cancer prevention. News stories about cancer causes tend to be sensationalistic because they often focus on causes that (a) are new or controversial yet (b) are encountered by a sizeable proportion of the audience in their daily lives (Russell, 1999; Taubes, 1995). The intense competitive pressure in local TV is thought to be a culprit for particularly low-quality news stories and high sensationalism relative to newspapers (Zaller, 1999). These factors lead to our first hypothesis:

H1: Local TV news coverage will be more likely than local newspaper coverage to report on the causes of cancer.

There are large resource constraints among local TV stations, producing fewer reporters for TV news relative to newspapers (Potter & Kurpius, 2000). Given the lack of resources, shorter deadlines for broadcasting stories and shorter time for presenting detailed information, TV journalists may also be more prone to covering research press releases about cancer research.

H2: Local TV news coverage will be more likely than local newspaper coverage to cover reports of new cancer research.

The limited timeframe for conveying information in a TV news segment relative to a newspaper article should also decrease the likelihood that local TV cancer news stories will provide FI to the audience. FI provides details that could enable audiences to follow up on an action encouraged by the story. A lack of such information would prevent the viewer from being able to find source material behind the news stories to assess the credibility of scientific evidence about a cancer cause or research study.

H3: Local TV news coverage will be less likely than local newspaper coverage to include follow-up information about cancer or cancer research.

Cancer research studies that make the news often focus on novel or controversial findings (Russell, 1999; Stryker, 2002). Repeated exposure to stories that highlight uncertain cancer causes, particularly those identified by single research studies that

have not yet been replicated, seems particularly likely to engender the belief that everything causes cancer. Cancer cause stories also carry implicit information about ways to prevent cancer (avoid the cause). Thus, repeated exposure to stories about cancer causes may also contribute to a sense that there are so many recommendations about preventing cancer, and it is hard to know which ones to follow. These effects would be exacerbated by a lack of FI, where a viewer is not given adequate information to investigate the information's source or credibility. Consequently, the extent to which a news source's cancer coverage tends to focus on cancer causes, summarize cancer research (particularly studies about novel or controversial causes), and omit FI should predict the extent to which exposure to that source engenders fatalistic beliefs about cancer prevention. Based on this proposition and our hypothesized patterns of coverage, we expect viewers of local TV news to be most likely to hold fatalistic beliefs.

H4: Local TV news viewing will be positively associated with an index of fatalistic beliefs about cancer prevention, controlling for sociodemographic factors.

Contributions to cultivation research

This article shares cultivation analysis's focus on cumulative effects of exposure to TV content with specific attention to possible effects of local TV news. Although we do not directly compare viewer perceptions to real-world prevalence of, say, crime, we do assume that views about cancer prevention need not be fatalistic. The reality is that everything does not cause cancer, and major institutions such as the National Cancer Institute (NCI) and American Cancer Society (ACS) have made clear recommendations about effective ways to reduce cancer risk. Thus, agreement with the fatalistic beliefs that everything causes cancer or that there are too many recommendations about cancer prevention constitutes a discrepancy between viewer perceptions and the reality of cancer prevention.

Knowledge gaps and local TV news about cancer

The knowledge gap hypothesis proposes that individuals with greater education tend to acquire information provided by news coverage at a faster rate than those with lower education (Tichenor, Donohue, & Olien, 1970). As a result, gaps in knowledge between more and less educated groups may increase over time (Viswanath & Finnegan, 1996).

Hypotheses related to knowledge gaps

On its face, what we know about local TV content and fatalistic beliefs about cancer prevention might suggest patterns counter to those one would expect based on traditional knowledge gap research. If local TV news about cancer is detrimental and highly educated individuals acquire this information more quickly than less educated individuals, we might expect the relationship between local TV news exposure and fatalistic beliefs to be strongest among the most highly educated. Alternatively, some

authors find that TV news does not increase knowledge and, in fact, may inhibit knowledge gain among audiences regardless of education (Patterson & McClure, 1976; Robinson & Davis, 1990). This might lead us to expect equivalent relationships between local TV news exposure and fatalistic beliefs by education.

Yet education is negatively associated with these beliefs, making it highly unlikely that local TV coverage of cancer increases fatalistic beliefs more among highly educated than less educated populations (Niederdeppe & Levy, 2007). The next logical question is to ask how less educated populations develop greater fatalism relative to more educated populations. Differential effects of local TV cancer news provide one plausible explanation. TV news provides information to the least educated in ways that are less cognitively demanding than print media (Eveland & Scheufele, 2000; Kwak, 1999; Neuman, 1976), and populations with low levels of formal education may lack the cognitive skills to make sense of complex scientific evidence related to cancer causes (Viswanath, 2006). To the extent that this information makes viewers prone to fatalistic beliefs, exposure to local TV coverage would be likely to increase educational gaps in these beliefs. Specifically, we should expect local TV cancer news coverage to have a larger impact on fatalistic beliefs among less educated compared to more educated populations.

H5: The expected positive association between local TV news viewing and fatalistic beliefs about cancer prevention will be stronger as education decreases.

Contributions to knowledge gap research

This article builds on the tradition of knowledge gap research in our assessment of educational differences in response to local TV news exposure. We diverge from traditional knowledge gap research in our focus on the effects of aggregate TV news coverage (vs. a discrete news event) to incorporate the cumulative effects central to cultivation theory. We also differ in our focus on fatalistic beliefs about cancer prevention, in contrast to discrete facts and knowledge, as the outcome of interest.

Overview of study objectives

This article describes results from two studies, one using 2002 data and the other one using data from 2005, to test the five hypotheses. We do not argue for a direct link between the specific content of 2002 news coverage (Study 1) and 2005 survey data (Study 2). Rather, Study 1 assesses the plausibility of the claim that local TV news has a tendency to cover cancer in a way that is more likely than other types of coverage, in the long term, to be detrimental. To do so, we compare cancer news stories from the largest national sample of local TV news ever collected to a large sample of local newspaper stories about cancer during the same time period. In light of significant differences between local TV and newspaper coverage about cancer, Study 2 uses national survey data to test associations between local TV news viewing and fatalistic beliefs about cancer prevention, paying specific attention to possible differences in these associations by education.

Study 1

Methods

We addressed H1, H2, and H3 by comparing (a) a national sample of local U.S. TV news coverage ($n = 122$ TV stations) sampled in October 2002 to (b) a national sample of newspaper coverage ($n = 60$ newspapers) sampled between October 2002 and March 2003.

Local TV news data

Local TV cancer news coverage data were drawn from the University of Wisconsin (UW) NewsLab's sample of local TV news broadcasts from 2002, conducted in collaboration with the Norman Lear Center at the Annenberg School for Communication at the University of Southern California (USC). UW NewsLab collected evening news broadcasts from a random sample of 122 local U.S. TV stations drawn from a sampling frame of 200 stations (comprising the four major affiliates in each market) from the top 50 media markets, covering 67% of the nation's population. Up to two half-hour news broadcasts were sampled from each station every evening from September 18 through November 4, 2002, the highest-rated half-hour of early evening news and the highest-rated half-hour of late-evening news on each station. The 2002 dataset was originally collected to assess the quantity and quality of local TV political coverage (see Fowler et al., 2007, and Hale, Fowler, & Goldstein, 2007, for more information on the complete methodology). In partnership with the University of Michigan, all late-evening (usually 10 or 11 p.m.) news broadcasts from October 2002 were reanalyzed for health coverage (see Pribble et al., 2006 for the complete methodology). Late-evening broadcasts were the focus of these analyses because they tend to include more health news than earlier broadcasts, often include segments originally aired earlier in the day, and attract a larger audience than morning or daytime local TV news (see Dean & Pertilla, 2007). Of 2,795 captured broadcasts, 1,799 health stories were identified, 258 (14%) of which were about cancer.

Newspaper data

We used the Lexis-Nexis database to identify cancer news stories in major newspapers from each of the top 50 media markets between October 2002 and March 2003. A validated search term, developed by Stryker, Wray, Hornik, and Yanovitzky (2006) and replicated by Niederdeppe, Frosch & Hornik (2008), was used to automate the retrieval of relevant articles about cancer. We applied this search term to entire month of October 2002 (to match the local TV news sample) and a one-third sample of days between November 2002 and March 2003 (Evans & Ulasevich, 2005). The November 2002 through March 2003 sample was used to assess whether the patterns of coverage in October 2002, Breast Cancer Awareness Month, were similar to those from other months. The search yielded a total of 1,156 articles for October 2002 and 1,333 articles for a one-third sample of days between November 2002 and March 2003. We did not conduct a parallel comparative analysis with local TV news because November 2002

through March 2003 data were not collected as part of the original UW NewsLab sample, and archival local TV news data were not available through Lexis-Nexis.

Content analysis procedures

Six undergraduate coders (all six for TV and four for print) content analyzed 258 local TV news stories and 2,489 newspaper articles about cancer. Coders were asked to determine the primary cancer type (e.g., breast, colon, lung, prostate, skin, etc.) and primary cancer topic (e.g., cause, prevention, screening, diagnosis, treatment, survivorship, death, funding, prevalence, etc.) of the story. In addition, coders were asked to identify whether or not each story (a) mentioned a cause of cancer, (b) discussed scientific research concerning cancer (including research focusing on causes, prevention, screening, or treatment), and (c) included FI (e.g., phone number, e-mail address, website, etc.) enabling viewers or readers to find additional information or resources from the report (Table 1).

We reviewed codebooks from previous cancer news content analyses (Nabi, 2007; Slater et al., 2008; Stryker et al., 2007; Wang & Gantz, 2007) and identified relevant constructs to address study hypotheses and pilot tested these measures on a small set of TV and print stories. Through a series of iterative modifications, we arrived at a codebook that was ready for empirical reliability assessment. Before proceeding to code the full sample, each coder analyzed a subsample of 50 TV news stories (20%) and 50 newspaper stories (2%) for pretest intercoder reliability. Due to the large volume of newspaper stories relative to TV stories, we double-coded an additional 417 newspaper articles (14%) after coding began to ensure that coders remained reliable in their assessments (Lombard, Snyder-Duch, & Bracken, 2002). κ scores for each variable and coder pair always exceeded .70 with one pair exception (.65). Across coder pairs, the average κ scores ranged from .71 to .92 (TV pretest), .79 to .92 (newspaper pretest), and .75 to .85 (newspaper concurrent).

Analytic approach

Although exposure to a greater number of stories concerning cancer causes, research, and FI may be consequential, direct comparisons in the volume of local TV news and newspaper stories would be misleading. The number of discrete stories on a typical 30-minute newscast is far smaller than the number of stories carried in a daily newspaper. Our analysis thus focused on the proportion of messages within each medium that discuss cancer causes, research, and follow-up. We examined the proportion of stories with a primary focus on a cancer cause or causes, those that mention a cancer cause or causes (even if not the primary focus), those that summarize scientific cancer research, and those that include FI. To assess the extent to which local TV cancer coverage differed from newspaper coverage during October 2002 (H1 through H3), we conducted one-tailed unpaired *t* tests. We also assessed the extent to which October 2002 coverage was representative of cancer coverage more generally throughout the year by conducting two-tailed, unpaired sample mean comparisons between print coverage in October 2002 and the one-third sample

Table 1 Content Analytic Item Descriptions and Inter-coder Reliability κ Scores

Variable Description	Television Pretest (<i>n</i> = 50)	Newspaper Pretest (<i>n</i> = 50)	Newspaper Concurrent (<i>n</i> = 417)
Primary cancer type			
Determine the primary type of cancer discussed in the story by assessing two factors: (a) prominence of the discussion of different types of cancer and (b) quantity of coverage of different types of cancers. High prominence goes to the cancer type discussed in the headline and lead. Less prominence is given to types discussed later in the story. Determine quantity of coverage by estimating the amount of time/number of words devoted to the cancer types discussed in the story. Categories include breast, colon, skin, lung, prostate, cervical, testicular, blood leukemia, and others	.92	.81	.85
Primary cancer topic			
Determine the primary cancer topic discussed in the story by assessing the prominence of the discussion of different topics. The primary cancer topic is the one that is the most prominent. High prominence goes to the cancer topic discussed in the headline and the lead (the first 5 seconds of a TV story or the first two paragraphs of a print story). Categories include causes, prevention, screening, diagnosis, treatment, survivorship, death, funding, health care industry, prevalence, and other	.83	.82	.83
Cancer cause mentioned			
Causes of cancer include factors that increase a person's or group's risk of getting cancer. Examples include environmental toxins, genetic factors or family history, and behaviors (e.g., eating habits, smoking, and exercise habits).	.85	.92	.75

(continued overleaf)

Table 1 (Continued)

Variable Description	Television Pretest (<i>n</i> = 50)	Newspaper Pretest (<i>n</i> = 50)	Newspaper Concurrent (<i>n</i> = 417)
Determine whether or not the story mentions causes of cancer			
Cancer research mentioned			
Does the story report on scientific research about (a) cancer causes, (b) how to prevent cancer, (c) effective ways to screen for cancer, or (d) how to treat cancer?	.83	.86	.78
Determine whether the story reports on scientific research findings about cancer causes, cancer prevention, screening/early detection, or treatment. Use the definitions of cancer causes, cancer prevention, screening, and treatment outlined in the primary cancer topic variable			
Follow-up information provided			
Follow-up information (FI) contains complete details about people, places, and/or things that enable readers to follow up on an action encouraged by the story. To be considered FI, the details given must enable readers to complete the action incited in the story or be full source data to enable readers to do further research. It is not enough to simply mention the journal title in which an article is published. There needs to be at least one additional piece of information, such as the mention of the issue number (e.g., the September issue of the <i>American Journal of Public Health</i>), the author, or the article title	.71	.79	.84

Note: Cells present κ scores averaged between each pair of coders.

of print coverage from November 2002 through March 2003. Results from both comparisons (October 2002 TV vs. October 2002 newspaper, and October 2002 newspaper vs. November 2002 through March 2003 newspaper) are displayed in Table 2. For illustrative purposes, we also describe the content of local TV stories that discuss cancer causes.

Results

Local TV cancer news stories addressed a variety of possible cancer causes. These included not only well-established causes such as obesity, smoking, alcohol use,

sun exposure, human papillomavirus (HPV) infections, genetic deficiencies, and environmental factors but also novel or controversial causes such as cellular telephone use, deodorant use, use of hormone replacement therapy, beef consumption, mold, diets rich with amino acids and sugars, solvents used in dry cleaning, and excessive exercise. Newspaper stories described a similar set of cancer causes but covered these topics less frequently than local TV. H1 was thus supported for both primary focus ($t = 3.35, p < .01$) and for mentions of cancer causes ($t = 1.79, p < .05$; Table 2). It is also noteworthy that 62 of the 70 local TV news stories that mentioned cancer causes (88%) were reports of cancer research studies (not reported in tables). Conversely, only 160 of the 251 newspaper stories that mentioned cancer causes (64%) were reports of cancer research studies (not reported in tables).

H2 was supported. Local TV news stories were much more likely than local newspapers to focus on scientific research ($t = 9.52, p < .01$). H3 was supported. Local TV news included FI less often than local newspaper coverage of cancer ($t = -8.83, p < .01$).

Comparing the two newspaper samples, breast cancer was far more likely to be the specific type of cancer covered in October compared to the other months ($t = 9.98, p < .01$). October stories were less likely than stories in November through March to primarily focus on cancer causes ($t = -3.36, p < .01$) but were equally likely to mention causes of cancer ($t = -1.01, p = .31$). October stories were more likely to focus on new research than stories in the other months ($t = 2.89, p < .01$), and there was no statistically significant difference in the inclusion of FI (Table 2).

Table 2 Local Television and Newspaper Coverage of Cancer, Sample Mean Comparisons

	Television (October 2002)	Newspaper (October 2002)	Newspaper (November 2002–March 2003)
Breast cancer as primary cancer type	.67**	.44***	.17
Cause as primary cancer topic	.21**	.12***	.17
Cancer cause mentioned	.27*	.22	.23
Cancer research mentioned	.67**	.36***	.31
Follow-up information provided	.17**	.41	.41
Total number of articles/stories	258	1,156	1,333

Note: Cells indicate the proportion of stories that represent each category within each sample.

*Denotes significant differences between the TV sample and the October 2002 newspaper sample at $p < .05$.

**Denotes $p < .01$.

***Denotes significant differences between the October 2002 newspaper sample and the November 2002 to March 2003 newspaper sample at $p < .01$.

Summary of findings

Study 1 establishes that local TV and newspaper coverage of cancer were substantively different in October 2002. Local TV stories about cancer were more likely to discuss cancer causes and cancer research but less likely to provide FI than newspaper stories. These results suggest that local TV news covers cancer in ways that may be particularly likely to cultivate fatalistic beliefs about cancer prevention.

Study 2

Methods

We address H4 and H5 using data from the 2005 Annenberg National Health Communication Survey (ANHCS), a national survey with detailed measures of both news media use and fatalistic beliefs about cancer prevention.

Survey data

ANHCS (2005), a publicly available dataset developed by researchers at the Annenberg Schools for Communication at the University of Pennsylvania and USC, was designed to capture national trends in media exposure, health cognitions, and behavior. The survey collected data from a nationally representative sample of U.S. adults between January 20, 2005 and December 27, 2005 (ANHCS, 2007a, 2007b). ANHCS data were collected by Knowledge Networks (KN), which maintain a panel of respondents recruited via random-digit-dialing (RDD). If necessary, panel participants received internet access (via Web TV) to complete surveys online. A total of 3,625 panel members participated in the 2005 ANHCS. Our analysis used a subset of 1,783 respondents who were randomly selected to receive items pertaining to fatalistic beliefs about cancer prevention. Monthly panel recruitment response rates averaged 30.5% (range 26–34%), whereas the survey completion rate among panel members averaged 74.3% (range 69–77%). Study procedures and the survey instrument were approved by Institutional Review Boards at both sponsoring universities.

The unweighted analytic sample contained more women (50.3%, $n = 897$) than men, with a mean age of 46.70 years (range = 18–99, $SD = 16.68$). Most participants without missing values described themselves as Caucasian (75.3%, $n = 1,783$); 9.9% self-identified as African American ($n = 176$), 10.1% as Hispanic ($n = 180$), and 4.7% as another race ($n = 84$). Data from the Current Population Survey (CPS) were used to create population weights so the data would reflect U.S. population estimates for major demographic characteristics. We conducted all analyses with these population weights using STATA. Distribution estimates shown in the remainder of this article use weighted percentages.

Dependent variable: Index of fatalistic beliefs about cancer prevention

ANHCS respondents were asked to report their level of agreement with two statements used in previous studies to gauge fatalistic beliefs about cancer prevention: “It seems like almost everything causes cancer” and “there are so many recommendations about preventing cancer, it’s hard to know which ones to follow” (Niederdeppe &

Levy, 2007). A third item used in the previous studies of fatalistic beliefs, "There's not much people can do to lower their chances of getting cancer," was not included in the survey. The two ANHCS items address different components of fatalism, including pessimism ("everything causes. . .") and confusion ("hard to know. . ."). Each item was measured with a 5-point Likert scale with response categories ranging from strongly disagree (1) to strongly agree (5). The two belief items were correlated ($r = .37$). We thus created a two-item index of fatalistic beliefs about cancer prevention ($M = 7.43$, range 2–10, $SD = 1.89$).

Independent variable: Local TV news viewing

Local TV news viewing was assessed by asking, "In the past 7 days, on how many days did you watch the local news on TV?" Recent viewing was used as a proxy for habitual patterns of local TV news viewing. The average respondent watched local TV news most nights in the past week ($M = 4.21$, $SD = 2.57$).

Hypothesized moderating variable: Education

Nine response categories were provided for the question, "What is the highest level of school you completed?" Responses were coded into four categorical variables, identifying respondents who did not complete high school or equivalent (17%), completed high school but no more (31%), attended some college or technical school (27%), or graduated college (25%).

Control variables

Previous studies identify several demographic factors that are associated with fatalistic beliefs about cancer prevention (Han et al., 2007; Niederdeppe & Levy, 2007). These variables include age, sex, race/ethnicity, marital status (59% married vs. not married), working status (62% working full- or part-time vs. not working full- or part-time), household size ($M = 2.7$, range 1–6, $SD = 1.3$), frequency of religious service attendance (31% weekly, 47% rarely), and personal cancer history (whether or not has been diagnosed with cancer by a doctor; 6%). We included these variables in all multivariate models to account for their potential confounding of the relationship between local TV news viewing and fatalistic beliefs about cancer prevention.

We included a variety of health-related variables that might influence both beliefs about cancer prevention and TV viewing patterns. Self-rated health was worded as follows: "In general, would you say that your health is. . ." with responses including poor or very poor (5%), fair (17%), good (44%), and very good or excellent (34%). We also calculated body-mass index (BMI; a measure of overweight) by dividing self-reported weight (in kg) by height (in m^2 ; $M = 28.4$, range 7–60, $SD = 6.6$). Finally, we accounted for smoking and drinking behaviors by asking whether a respondent had smoked a cigarette (26%) or drank five or more drinks in one sitting in the past 30 days (26%).

We also included four variables designed to measure news exposure from channels other than local TV news. These items were worded in a manner parallel to the wording of the local TV news viewing measure: In the past 7 days, on how many days

did you. . . (read a newspaper [$M = 3.07, SD = 2.84$]; watch the national news on TV [$M = 3.22, SD = 2.72$]; listen to radio talk-shows or news [$M = 2.14, SD = 2.58$]; and use the Internet, other than e-mail? [$M = 3.44, SD = 2.81$]). We included these variables in all multivariate models to account for the possibility that local TV news viewing might be indicative of a broader pattern of news media exposure, a pattern that could confound the interpretation of any association between local TV viewing and fatalistic beliefs. We also controlled for overall TV viewing by combining responses to two questions: "On a typical weekday, about how many hours do you watch TV each day?" and "During a typical weekend, about how many total hours do you watch TV?" We created a measure to reflect the average hours of daily TV viewing ($M = 5.05$, range 0–16, $SD = 3.51$). This measure was used to control for the possibility that local TV news viewing might simply reflect a broader pattern of hours spent in front of the TV.

Analytic approach

We estimated a series of ordinary least squares (OLS) regression models to test H4 and H5. We began with a series of separate OLS regression models to assess the bivariate relationships between local TV news, each control variable, and fatalistic beliefs about cancer prevention. Results from these models are shown in Table 3, second column. Next, we estimated a multiple OLS regression model, controlling for demographics, health, health behaviors, and media use, to test H4. A β coefficient for local TV news viewing that was greater than zero and statistically significant would be considered evidence in support of H4. Results from this model are displayed in Table 3, third column. Finally, we estimated a second multiple OLS regression model, including a series of interaction terms between local TV news viewing and education, to test H5. We included three interaction terms, including each of the three indicator variables for education (with college degree as the reference group). A β coefficient for any of these interaction terms that was greater than zero and statistically significant would be considered evidence in support of H5. Results from this model are shown in Table 3, fourth column. We used results from this regression to calculate model-predicted values for the index of fatalistic beliefs about cancer prevention among four groups: college degree with no local TV viewing, college degree with daily local TV viewing, less than high-school diploma with no local TV viewing, and less than high-school diploma with daily local TV viewing. We present these values to illustrate the basic pattern of observed results related to H5.

Results

H4 was supported. Local TV news viewing was positively associated with the index of fatalistic beliefs about cancer prevention, in both a bivariate model ($\beta = .07, p < .05$) and in a multivariate model that controlled for sociodemographic factors ($\beta = .10, p < .05$). Other significant predictors of the index in the multivariate model included having only a high-school diploma ($\beta = .09, p < .05$), working

Table 3 Ordinary Least Squares Regression Models Testing Variables Associated With an Index of Fatalistic Beliefs About Cancer Prevention

Independent Variables	Bivariate Models	Multivariate Model	Model With Interactions
Variables related to Hypothesis 4			
Number of days watching local TV news in past week	.07*(.026)	.10*(.026)	.11(.080)
Variables related to Hypothesis 5			
Education less than high-school diploma (vs. college degree)	.09**(.009)	.06(.137)	.11(.101)
Education completed high school (vs. college degree)	.12**(.001)	.09*(.018)	.07(.309)
Education some college (vs. college degree)	.07 (.072)	.05(.206)	.06(.427)
Education less than high-school diploma × local TV news viewing	—	—	-.07(.342)
Education completed high school × local TV news viewing	—	—	.02(.807)
Education some college × local TV news viewing	—	—	-.02(.801)
Control variables			
Age	-.05(.092)	-.03(.452)	-.03(.475)
Female (vs. male)	.02(.491)	.01(.670)	.01(.658)
Non-Hispanic (NH) African American (vs. NH White)	-.02(.445)	-.06(.056)	-.06(.059)
Hispanic (vs. NH White)	-.04(.202)	-.05(.086)	-.05(.075)
NH other (vs. NH White)	-.06(.106)	-.03(.404)	-.03(.415)
Working full- or part-time	.03(.383)	.08*(.041)	.08*(.042)
Married	-.03(.333)	-.01(.779)	-.01(.779)
Household size	.03(.356)	.02(.616)	.02(.624)
Self-rated poor or very poor health (vs. very good or excellent)	.09**(.002)	.08*(.016)	.08*(.016)
Self-rated fair health (vs. very good or excellent)	.08*(.018)	.06(.091)	.07(.082)
Self-rated good health (vs. very good or excellent)	.07*(.035)	.06(.069)	.06(.081)
Body mass index (BMI)	.04(.210)	.02(.626)	.02(.590)

(continued overleaf)

Table 3 (continued)

Independent Variables	Bivariate Models	Multivariate Model	Model With Interactions
Smoking in past 30 days	.09** (.001)	.05 (.092)	.05 (.101)
Binge drinking in past 30 days	.08** (.002)	.05 (.105)	.05 (.095)
Average daily hours of TV viewing	.09** (.002)	.08** (.007)	.08** (.006)
Number of days reading newspaper in past week	-.04 (.187)	.00 (.896)	-.01 (.866)
Number of days watching national TV news in past week	-.01 (.719)	-.06 (.157)	-.07 (.147)
Number of days listening to radio news in past week	-.05 (.074)	-.05 (.101)	-.05 (.105)
Number of days using internet (non e-mail) in past week	-.01 (.787)	.00 (.906)	.01 (.825)
R^2	—	.06	.06
Number of observations	1,783	1,633	1,633

Notes: Cells contain β -coefficient estimates and p -values in parentheses. Each model used population weights to adjust estimates for nonresponse and sampling noncoverage. Personally had cancer and weekly religious attendance were not significant predictors of the index and were dropped because their inclusion substantially increased the number of missing cases in the multivariate model.

*Denotes β -coefficients different from 0 at $p < .05$.

** $p < .01$.

full- or part-time ($\beta = .08$, $p < .05$), having poor or very poor self-rated health ($\beta = .08$, $p < .05$), and average daily TV viewing ($\beta = .08$, $p < .01$; Table 3).

H5 was not supported. All three interaction terms between local TV news viewing and categories of education were nonsignificant, and two were negative (wrong direction; Table 3). Model-predicted values for respondents with a college degree ranged from 6.69 (no local TV viewing) to 7.44 (daily local TV viewing), whereas predicted values for respondents with less than a high-school diploma ranged from 7.42 (no local TV viewing) to 7.68 (daily local TV viewing).

Discussion

Results from content and survey analyses make plausible the claim that local TV cancer news coverage may cultivate fatalistic beliefs about cancer prevention. Contrary to studies that assume that TV content or news media are monolithic, we found evidence that suggests local TV news coverage may be particularly harmful. More than one

in five local TV cancer news stories focused on a cancer cause or causes, and many of the causes described were novel or controversial and yet likely to be relevant to many individuals (e.g., cell phone use, beef consumption, dry cleaning, and exercise). Almost all local TV stories that mentioned cancer causes were reports of scientific research. More broadly, two out of three local TV cancer news stories discussed research findings. This is particularly concerning because newsworthy cancer studies tend to be those that report on novel or controversial findings (Stryker, 2002), perhaps at the expense of well-documented causes and known prevention methods (Russell, 1999). FI was rarely included. While newspapers also reported on cancer causes and research, they did so with far less frequency than local TV and provided information that would enable readers to assess the source of the information nearly half of the time. Specifically, local TV news stories were more likely than newspaper stories to focus on and discuss causes of cancer (supporting H1), more likely to discuss scientific research findings (supporting H2), and less likely to include information that would allow viewers to follow up by seeking out additional resources, guidance, or advice regarding the coverage they watched (supporting H3).

These patterns suggest a tendency for local TV news to focus on aspects of cancer that are likely to cultivate the beliefs that everything causes cancer or that there are too many recommendations about cancer prevention. Informed by cultivation theory, we hypothesized that local TV viewing would be associated with these beliefs. National survey data analyses provided evidence consistent with this assertion. Local TV news viewing was positively associated with an index of fatalistic beliefs about cancer prevention, controlling for sociodemographic factors (supporting H4). Building on the knowledge gap hypothesis, we also hypothesized that local TV news viewing would be more strongly associated with fatalistic beliefs among less educated populations. Statistical tests failed to support this assertion (contrary to H5).

Revisiting cultivation theory

Findings suggest that content-specific extensions of cultivation theory, particularly those focused on local TV news, are useful additions (Lowry et al., 2003; Romer et al., 2003). At the same time, broader patterns of TV content may also be consequential in cultivating fatalistic beliefs about cancer prevention. We observed a significant relationship between overall TV viewing and fatalistic beliefs about cancer prevention, controlling for local TV viewing. There is no shortage of attention to health topics on TV, in the form of soap operas in medical settings (e.g., *General Hospital*), prime time dramas about doctors and hospitals (e.g., *House*, *Grey's Anatomy*, *E.R.*), talk-shows that periodically interview cancer survivors (e.g., Oprah), or advertisements for products, services, or fundraisers related to cancer (e.g., cancer-screening services at a local hospital). Content within these programs may shape beliefs about cancer prevention. Alternatively, TV viewing may simply be associated with broader personality traits that are also associated with these beliefs, such as locus of control (Potter, 1987). Future studies should examine references to cancer causes and research on entertainment programs or advertisements that appear

during these programs or news broadcasts. These efforts would inform the question of whether broader patterns of exposure to TV's general treatment of cancer may contribute to fatalistic beliefs about cancer prevention.

More broadly, our findings suggest that content-specific extensions to cultivation theory might be best conceptualized as a complement to, rather than a replacement for, traditional cultivation analysis. Overarching patterns of TV content likely shape social beliefs, but specific genres of content may be more or less consequential than others. Content-specific extensions do provide greater practical guidance for those in the public health arena who may wish to intervene to correct misperceptions about cancer prevention. For instance, one could envision an intervention to train local TV news reporters to provide FI and place new research findings into the context of established recommendations for cancer prevention, or a scenario where health communication researchers work with TV writers and producers to accurately portray health content in TV dramas. Both types of projects are currently underway in the United States, including projects at USC to train journalists on how to cover health (California Endowment Health Journalism Fellowships, 2008) and to provide entertainment industry professionals with accurate and timely information for health storylines (Health, Hollywood, & Society, 2008). The extension of cultivation analysis to focus on differential effects of specific genres of TV content (e.g., local TV news, TV dramas) may provide a useful theoretical backdrop for interventions designed to shape health content within these genres.

Revisiting the knowledge gap hypothesis

This article also built on the tradition of knowledge gap research by examining educational differences in response to news media content. Although some have suggested that TV news may reduce knowledge gaps by providing information to the least educated in ways that are comparably easy to process (Kwak, 1999), this assertion rests on the assumption that TV news provides useful information capable of attenuating knowledge gaps. The accumulated evidence, including content analytic results presented here, suggests that local TV news may not always provide information that is useful in this regard. At the same time, we found no evidence that local TV news viewing was more strongly associated with fatalistic beliefs about cancer prevention among lower versus higher educated populations. In fact, although not statistically significant, comparisons in model-predicted values for the index of fatalistic beliefs between college educated respondents and those without a high-school diploma suggest that the relationship between local TV viewing and fatalism could be weaker among those with lower education. Either way, differential response to local TV news does not appear to account for the association between low education and higher fatalistic beliefs about cancer prevention. Future extensions of knowledge gap research, particularly those focused on TV as a channel with the potential to reduce or increase gaps, would benefit by distinguishing between types of content (e.g., local news, national news, and talk-shows) and examining the effects of each content type among socioeconomically diverse groups.

Study limitations

There are several study limitations worth noting. First, the timing of the local TV content analysis (2002) was not concurrent with the timing of the national survey (2005). It is possible that local TV news coverage about cancer has changed since 2002 to focus less on cancer causes and research. Such a change would undermine the argument that local TV news coverage is substantively different from newspaper coverage. The Project for Excellence in Journalism (2007) recently noted, “if TV stations are innovating or improving their journalism, most viewers say they haven’t noticed it” (p. 2), suggesting that local TV news coverage has not dramatically improved. This assertion has not, however, been empirically tested.

Second, our sample of local TV news coverage was restricted to a single month, October 2002. Cultivation analysis typically monitors longer term trends in televised content (see Gerbner *et al.*, 1980). October 2002 was also Breast Cancer Awareness Month and immediately preceded the 2002 midterm elections, raising questions about the degree to which the sample is representative of broader patterns of local TV news coverage. Newspaper coverage data suggest that, for at least one type of media, Breast Cancer Awareness Month did not drastically influence patterns of coverage most relevant for this study. While the proportion of newspaper stories focused on breast cancer was substantially higher in October 2002 relative to November 2002 through March 2003, the proportion of stories mentioning (but not focusing on) cancer causes and reporting FI were equivalent. These results suggest that media channels may be consistent in their pattern of coverage of these issues. We did find differences in mentions of research, such that print coverage of research decreased after October 2002. This pattern would suggest an even greater discrepancy between local TV and print news on this dimension. We believe that the local TV news coverage data, despite their limitations, are of unique value given the high costs of collecting national samples of local TV news content (see Slater *et al.*, 2008; Wang & Gantz, 2007). To our knowledge, this study represents the largest sample of local TV coverage about cancer ever collected, in terms of population coverage.

Third, reliance on cross-sectional associations does not permit causal claims about the relationship between local TV news coverage and fatalistic beliefs about cancer prevention. While the inclusion of content analytic data showing systematic differences between local TV and newspaper coverage of cancer suggests the plausibility of a causal relationship, it is possible that differences between local TV news viewers and nonviewers explain the observed associations, regardless of local TV news content. Somewhere in between, Slater (2007) suggested that such a relationship might be usefully characterized as a reinforcing spiral, where different types of audience select different media, which in turn influence their beliefs, which in turn influence their selection of media, and so on. Our cross-sectional data are far too limited to make such a claim, but they do suggest promising avenues for future research involving longitudinal designs.

Future directions

While concurrent survey and content analysis would enable us to more accurately assess cancer news exposure as a function of both individual viewing habits and actual content of messages being aired (see Freedman & Goldstein, 1999), our representative sample of local TV cancer coverage from the top 50 media markets reveals that traditional survey measures of media use may be insufficient to capture the variation in cancer messages actually airing. Specifically, although the media market within which an individual resides is essential information in determining what media messages the individual might receive, there is substantial heterogeneity in the volume and content of cancer messages airing on local TV stations both *between* and *within* the same media market (Figure 1). This suggests that market-level analysis may not be sufficient to adequately assess the volume of messages to which citizens may be exposed. In other words, future work on the effect of local TV news coverage should account for which station’s local TV news an individual watches in addition to the market within which he or she resides. This variation also highlights the need for research explaining the factors influencing variation in health and cancer coverage between and within markets (see Pollock, 2007).

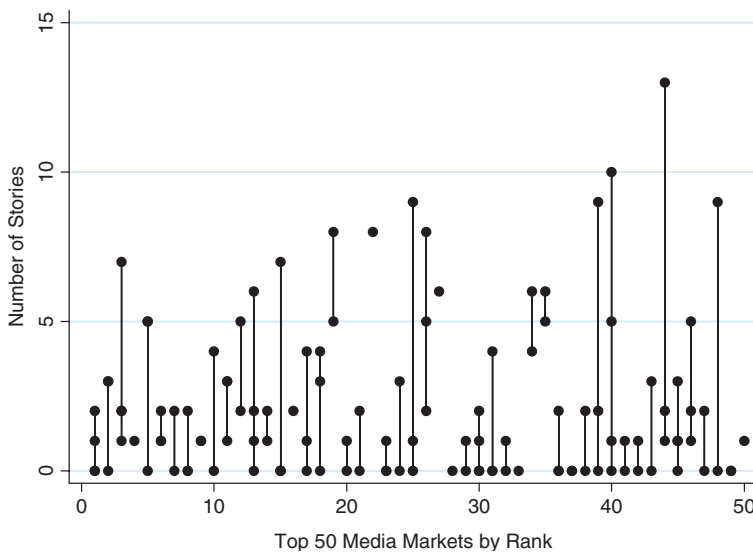


Figure 1 Variance in the volume of local television news cancer coverage between and within the top 50 media markets.

Notes: UW NewsLab captured between one and four of the four major affiliate stations (ABC, CBS, Fox, and NBC) per market during October 2002. Bars represent the range in volume of cancer coverage between all captured local television stations within the same media market for the month, and dots represent cancer coverage on each individual stations captured. Markets are order by size from the largest (1), New York, to the smallest (50) of the top 50, Louisville.

Future work should also consider the appropriate time lag necessary between actual airing of cancer messages and when such coverage is likely to affect individual beliefs. Longitudinal panel data, supplemented with content analysis, may be especially useful in this regard. Finally, in comparison to local newspaper archives, the cost of obtaining local TV news data has traditionally been prohibitively expensive, and although changing technology is beginning to make the capture and analysis of this content more accessible to scholars (Hale et al., 2007), studies of local TV remain few and far between. Although the costs of local TV research still exceed other content, given that local TV newscasts remain a major source of information in the United States (Pew Center for the People and the Press, 2006), more work should examine both the content and effects of local TV news.

Conclusions

This study provides evidence consistent with the claim that local TV news coverage may promote fatalistic beliefs about cancer prevention. While associations between local TV news viewing and fatalistic beliefs were cross-sectional in nature, content analytic results showing notable differences between local TV and newspaper coverage of cancer suggest the plausibility of a causal relationship. Findings extend cultivation theory to focus on the effects of particular types of TV content on beliefs about cancer prevention and add to a growing body of evidence about local TV news and knowledge gaps. Future studies should make use of between- and within-market variation in local TV coverage of cancer, longitudinal survey data, and content analysis of local TV news content to provide stronger causal tests of the relationship between local TV news and fatalistic beliefs about cancer prevention.

Acknowledgments

The authors are grateful to the Robert Wood Johnson Foundation Health and Society Scholars Program at the University of Wisconsin and the Robert Wood Johnson Foundation Health Policy Scholars Program at the University of Michigan for funding the study. Funding for the survey data analysis was also provided by NIH P50 Grant CA095856 to the Annenberg School for Communication at the University of Pennsylvania. The authors would like to thank the Annenberg Trust at Sunnylands for funding the survey data collection and the Annenberg Schools at the University of Pennsylvania and University of Southern California for developing the survey. The authors would also like to thank Paula Lantz and Peter Ubel for their comments on an earlier version of this article, and Michael Cody and two anonymous reviewers for their insightful comments on improving the clarity of the article.

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地方电视新闻报道是否会培养癌症预防的宿命论观点？

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【摘要：】

尽管大多数因癌症的死亡是可以预防的，仍然有许多美国成年人对癌症预防持有宿命论的观点。有些学者认为新闻报道是促成这些看法的其中一个来源。我们的研究结果基于两个研究：评估地方电视新闻培养有关癌症预防的宿命论的观点的可能性。第一项研究是对2002年10月的一个地方电视台和报纸关于癌症的报道的全国抽样的内容分析。总体而言，研究结果与地方电视新闻报道会促进对癌症预防宿命论的观点相一致。最后我们讨论了研究涵化理论和知识沟假设的意义，并提出今后的研究重点。

La couverture des informations télévisées locales cultive-t-elle une perception fataliste de la prévention du cancer ?

Jeff Niederdeppe, Erika Franklin Fowler, Kenneth Goldstein, & James Pribble

Beaucoup d'adultes américains ont une perception fataliste de la prévention du cancer, malgré les preuves à l'effet qu'une grande proportion des décès dus au cancer sont évitables. Plusieurs chercheurs suggèrent que la couverture médiatique est l'une des sources de cette opinion. Nous rendons compte des résultats de deux études évaluant la plausibilité de l'affirmation selon laquelle les informations télévisées locales cultiveraient une perception fataliste de la prévention du cancer. La première étude fait état d'une analyse de contenu d'un échantillon national de la couverture du cancer en octobre 2002 par les télévision et les journaux locaux. Dans l'ensemble, les résultats appuient l'affirmation selon laquelle la couverture des informations télévisées locales pourrait promouvoir une perception fataliste de la prévention du cancer. Nous concluons par une discussion des conséquences de ces résultats pour la théorie de cultivation et l'hypothèse de l'écart des savoirs et par des suggestions pour la recherche future.

Kultiviert die lokale Fernschnachrichtenberichterstattung fatalistische Vorstellungen zur Krebsprävention

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Viele U.S. amerikanische Erwachsene haben fatalistische Vorstellung zur Krebsprävention, auch wenn es Beweise gibt, dass ein großer Anteil von Krebstodesfällen vermieden werden kann. Verschiedene Wissenschaftler nehmen an, dass die Nachrichtenberichterstattung eine Quelle für diese Ansichten ist. Wir dokumentieren Ergebnisse von zwei Studien, die die Plausibilität dieser Annahme zeigen, nämlich dass lokales Nachrichtenfernsehen fatalistische Ansichten zur Krebsprävention kultiviert. Studie 1 ist die Inhaltsanalyse einer nationalen Stichprobe von Fernsehlokalmeldungen und der Presseberichterstattung im Oktober 2002 zum Thema Krebs. Die Ergebnisse sind konsistent mit der Annahme, dass Fernsehlokalmeldungen fatalistische Ansichten zum Thema Krebsprävention beeinflussen. Wir schließen mit einer Diskussion der Implikationen für die Kultivierungstheorie und die Wissensklufthypothese und schlagen Forschungsfelder für die Zukunft vor.

Does Local Television News Coverage Cultivate Fatalistic Beliefs About Cancer Prevention?

지역방송뉴스보도가 암 예방에 관한 속명적인 믿음을 조장하는가?

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많은 미국의 어른들은 상당한 정도로 암사망을 예방할 수 있다는 증거에도 불구하고 암 예방에 관한 속명적인 믿음을 지니고 있다. 여러 학자들은 뉴스보도가 이러한 보도의 한 부분이라고 제안하고 있다. 우리는 지역 텔레비전 뉴스가 암 예방에 대한 속명적 믿음을 배양한다는 주장의 가능성에 대한 두가지 연구 결과를 보여주고자 한다. 첫번째 연구는 암에 관한 지역 방송과 신문보도에 대한 국가적 샘플에 대한 조사로 2002년 10월달에 내용분석을 통한 연구를 통해 실시되었다. 전체적으로 볼때, 발견들은 지역텔레비전 뉴스보도가 암 예방에 대한 속명적인 믿음들을 조장할 수 있다는 주장과 일치하는 것으로 나타났다. 우리는 배양이론에 대한 함의들을 논의하고 추가연구를 위한 제안을 하는 것으로서 연구결과의 결론을 맺었다.

¿Cultivan la Cobertura de Noticias de la Televisión Local Creencias Fatalistas sobre la Prevención del Cáncer?

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Resumen

Muchos adultos Norteamericanos sostienen creencias fatalistas sobre la prevención del cáncer a pesar de la evidencia que una proporción larga de las muertes de cáncer son prevenibles. Varios eruditos sugieren que la cobertura de noticias es una fuente de esas creencias. Reportamos los hallazgos de dos estudios que evaluaron la plausibilidad que la afirmación que las noticias de la televisión local (TV) cultiva las creencias fatalistas sobre la prevención del cáncer. El estudio 1 muestra un análisis de contenido de una muestra nacional de Octubre del 2002 de la cobertura sobre el cáncer en TV local y periódicos. En general, los hallazgos son consistentes con el alegato que la cobertura de noticias locales de TV pueden promover creencias fatalistas sobre la prevención del cáncer. Concluimos con una discusión de las implicancias de este estudio para la teoría de la cultivación y para la hipótesis de la brecha de conocimiento y sugiere el foco para la investigación futura.