

Sharing the news:

Effects of informational utility and opinion leadership on online news sharing

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Abstract

This study examined the joint effect of message and personality attributes on online news sharing. In two experiments ($N = 270$; $N = 275$) readers indicated their likelihood to share news representing two content domains and three informational utility dimensions. A moderated mediation path analysis was used. On average, news consumers shared news containing informational utility. Opinion leaders shared news irrespective of informational utility because they discerned informational utility in news that, objectively speaking, lacked such utility. In one experiment, opinion leaders also were more likely than non-leaders to share news perceived to contain informational utility.

Key words: electronic word-of-mouth, informational utility, news sharing, online news, opinion leadership, participatory journalism, social media

Online news sharing is “among the most important” news industry developments of the current decade, according to a 2011 Project on Excellence in Journalism report.¹ News distribution is an increasingly participatory process, with news organizations relying on referrals from social sites for traffic on their websites.² Two-thirds of online U.S. news consumers regularly receive news in emails or social media, and half of these consumers, in turn, forward news links to others.³ Younger adults currently share more online news than older adults, suggesting that online news sharing will remain a key component of the news distribution process.

The social sharing of news fits the trend of audience members being producers—both producers and users—of media content⁴ and is a component of online participatory journalism.⁵ Scholars have argued that the online sharing of news democratizes news production,⁶ although a comprehensive portrait is yet to emerge about who engages in news sharing and under what circumstances they do so.

Studies drawing on the uses-and-gratifications framework and similar approaches have identified various expectancies that online users say motivate their news and information sharing. An “information sharing” motive prompts Facebook users to share news links.⁷ On Twitter, social engagement and self-expression motivate users to retweet statements from political leaders.⁸ Consumer research shows that electronic word-of-mouth (eWOM)—the online sharing of consumer information—is motivated by users’ desires to connect socially and share ideas,⁹ express themselves,¹⁰ practice altruism,¹¹ impress others,¹² and communicate individualism.¹³ Overall, these studies highlight assorted possible intentions for sharing online information. Like many uses-and-gratification-focused studies, however, this research tends to generalize sharing motives across heterogeneous message features and users’ personality

differences.¹⁴ Evidence shows to the contrary that individuals' motives for using communication technologies depend on situation-specific attributes like the content being communicated and on individual users' tendencies to communicate.¹⁵

The present study, therefore, is guided by an interactionist perspective that considers behavior to be the joint product of environmental and personal factors.¹⁶ Message features constitute one environmental element associated with news sharing.¹⁷ Analyses of the most-shared articles in online newspapers show that readers share news that is non-controversial,¹⁸ that inspires awe, anger, or anxiety, and that contains positive and emotional language, practical utility, interest, and surprise.¹⁹ Independent of research on message features, demographic and personality work shows that younger, less affluent, and more partisan Americans are more likely to share online news.²⁰ Of the Big Five personality traits,²¹ conscientiousness is inversely associated and extroversion is positively associated with electronically forwarding consumer information.²²

Using two online experiments, this study builds on these previous independent-predictor models to illustrate the joint influence of informational utility (a message feature) and opinion leadership (a personality characteristic) on news sharing. Employing a moderated mediation approach, the analysis examines how informational utility and opinion leadership combine to shape news sharing. The study's conceptual model is platform-agnostic, predicting users' intentions to share news via social media without specifying a particular online service.

Conceptual background

Informational utility. The content of online news determines, in part, whether consumers share the news with others. A news item's informational utility constitutes one important content characteristic that may influence sharing. Content rich in informational utility helps media

consumers gain knowledge, develop an opinion, perform an action, or reinforce an already-held position.²³ Informational utility is both a conveyed function of news and a news consumer's evaluation of how relevant the news is to his or her well-being.²⁴ Behavioral outcomes of informational utility depend on the relevance of the positive or negative consequences communicated in the news, and on news consumers' perceptions of this relevance. Thus, a news message conveys a certain level of informational utility, and the extent to which news consumers act on the message is subject to their appraisal of this informational utility.

According to the informational utility model, informational utility of news is hypothesized to manifest along three specific dimensions: "(a) the perceived *magnitude of challenges or gratifications*, (b) the perceived *likelihood* of their materialization, and (c) their perceived *immediacy*."²⁵ To illustrate, news about a road construction project may be characterized in a news report and understood by news consumers as having major consequences (high magnitude) rather than minor ones; likely to affect the consumers (high likelihood), or unlikely to do so; and imminent (high immediacy), or delayed. Research shows that the informational utility of news as defined by these dimensions predicts consumers' selective exposure to threat-oriented and opportunity-oriented news, as well as news consumers' processing and retention of news.²⁶

Thus far, experimental tests of informational utility effects have focused on the conveyance of informational utility dimensions in news stories, attributing behavioral outcomes only to the informational utility communicated in news.²⁷ These analyses assumed, however, that readers exposed to a news report uniformly appraised the informational utility of this report. Perceived informational utility of news, however, has been theorized to mediate the link between informational utility in news and news consumers' resulting behavior.²⁸ Perceptions of

magnitude, likelihood, and immediacy, which constitute the recognition of conveyed utility according to the informational utility model, have been long documented to predict message effects.²⁹ Several studies testing the informational utility model assessed news consumers' perceptions of informational utility (variously labeled "perceived relevance," "importance," or "news evaluation"), but did not estimate the mediating function of these perceptions.³⁰ The present study, in contrast, makes an explicit distinction between informational utility conveyed in news and news consumers' perceived informational utility. The study measures the extent to which perceived informational utility constitutes a cognitive mechanism mediating the effect of informational utility on behavior, namely, news sharing intention.

It is common in some research contexts to distinguish between information as it is conveyed in mediated content and audience members' appraisal of this information. Protection motivation theory, for instance, postulates that individuals' appraisal of threat information mediates the effect of a threat message on the individuals' coping behaviors.³¹ The extent to which individuals act on the behavioral recommendation communicated in a threat message (e.g., avoid sun tanning) depends on how threatening they perceive the target behavior to be (i.e., sun tanning), and how able they perceive themselves to perform the recommended action.³² Cognitive processing research examines how individuals construct meanings from received information by engaging their memory structures and making inferences about the messages they consume.³³ Idiosyncratic interpretations of uniform messages are often related to personality and situational factors. In a study testing protection motivation theory and individual differences, for example, respondents who felt least in control of their health perceived the greatest risk in the behavior that the health threat message targeted.³⁴ In another study, viewers' interpretations of the messages conveyed in Army commercials varied by the viewers' ethnicity, education, and

prior experience with the military.³⁵ These studies and research approaches support the conceptual cogency of differentiating a conveyed message from a perceived message and assessing the mediating role of perception on message effects.

Accordingly, the present study distinguishes between actual and perceived informational utility. Actual informational utility is defined as the level of informational utility conveyed in a news item. In an experimental context, it is the manipulated level of informational utility (i.e., low vs. high). Differences between these manipulations are ascertained at the collective level using pretests and manipulation checks. Perceived informational utility, meanwhile, reflects individual users' evaluations of the informational utility conveyed in news items. While actual informational utility is likely to correlate with perceived informational utility, the two values will vary because of individual respondents' idiosyncratic perceptions of informational utility.

Turning to the behavioral outcome of informational utility, informational utility's effect on news sharing previously has not been tested experimentally. Recent work, however, does show that informational utility is associated with news sharing.³⁶ Studies suggest that informational utility constitutes a basic message feature of widely shared news because by sharing informational utility news, news consumers contribute positively to their online communities.³⁷ An analysis of nearly 7,000 *New York Times* articles showed that many widely shared pieces contained practical utility, a message feature that conceptually approximates informational utility.³⁸ Examples of *New York Times*' content containing practical utility included a voter guide and computer-recycling suggestions. In this analysis practical utility associated with news sharing even when other message features like interest, positivity, emotionality, awe, and anxiety were statistically controlled. A study of viral consumer emails, meanwhile, showed that utilitarian value, another message feature akin to informational utility,

predicted email forwarding.³⁹ Emails with utilitarian value in this study contained details about a product's price and features. Both studies suggest that informational utility is common among widely shared news.

In sum, the present study's first hypothesis draws from the expected effect of informational utility on news sharing, and from the conceptual distinction between actual and perceived informational utility. Because message features such as interest and anxiety also predict news sharing,⁴⁰ examining the mediating role of perceived informational utility helps ascertain that readers' evaluation of a news article's informational utility is actually associated with their intentions to share it. Thus, the first hypothesis [H1] is: perceived informational utility mediates the effect of actual informational utility on news-sharing intention.

Opinion leadership. According to the classic formulation, opinion leaders shape public opinion by selectively conveying mass media messages to their social networks.⁴¹ Opinion leadership can be conceptualized as a domain-independent, trait-like set of personality characteristics that are stable over time and across respondent groups.⁴² Although communication technology research tends to evoke opinion leadership in reference to the diffusion and adoption of new communication tools,⁴³ the present study is not about adoption. Rather, this study focuses on opinion leadership because a major premise driving today's content-sharing culture is that all news consumers can use social media to serve as opinion leaders for their personal networks.⁴⁴ The model advanced in this study, in contrast, affirms that opinion leadership predisposes some news consumers more than others to disseminate online news.

A growing literature shows that individuals' general behavioral inclinations relate to their behaviors in social media. For instance, extroverts and those who are less shy and less socially

lonely share more information on Facebook than introverts, those who are shy, and those who are more socially lonely.⁴⁵ Individuals also replicate their offline prosocial habits in social media.⁴⁶ Similarly, studies in consumer research show that opinion leaders and those who generally exhibit some opinion leadership qualities engage in increased eWOM, sharing product and entertainment information via mobile phones, email, and social media more than those who do not identify as opinion leaders.⁴⁷ The present study considers further what it is about opinion leaders that inclines them to share online information.

Informational and social attributes have been used to distinguish opinion leaders from non-leaders. Both sets of attributes can contribute uniquely to increased information sharing in offline and online contexts. Information gatekeeping is a key function of opinion leadership.⁴⁸ For some opinion leaders the propensity to share online information may be related to the gatekeeping practices in which they regularly engage. As gatekeepers for their personal networks, opinion leaders gather news from outside sources, filter what they deem to be worth sharing, and pass this information on to their networks. Accordingly, studies show that opinion leaders use more informational media than non-leaders,⁴⁹ and that they are more involved in news and more informed about news than non-leaders.⁵⁰

For some opinion leaders the tendency to share news also may be related to their social temperament. Opinion leaders tend to distinguish themselves from non-leaders as being more assertive, extroverted, and socially active.⁵¹ In one research tradition such an orientation is characterized as “personality strength,” with opinion leaders exhibiting greater personality strength than non-leaders.⁵² Recent research also shows a partial conceptual and empirical overlap between opinion leadership and extroversion.⁵³

While prior work documents an effect of opinion leadership on information sharing, this study examines how opinion leadership (a personality characteristic) combines with informational utility (a message feature) to shape news sharing. Opinion leaders' gatekeeping function and their sociability are reflected in this process. Figure 1 (top panel) presents three conceptual models of joint influence between informational utility and opinion leadership that correspond to the following hypotheses. The first two models reflect opinion leaders' gatekeeping and the associated increased news consumption and news mastery. These models suggest that opinion leadership influences news sharing while the informational utility of news is being appraised. As readers evaluate the informational utility conveyed in a news item, opinion leaders' evaluations may be more exacting than the non-leaders' evaluations because of opinion leaders' above-average news consumption and appreciation of relevant topics.⁵⁴ Opinion leaders' perceptions of high-informational utility news may be systematically higher than non-leaders' perceptions of the same news, while their perceptions of low-informational utility news may be systematically lower. This suggests that [H2a] opinion leadership moderates the effect of actual informational utility on perceived informational utility (Figure 1, Model A).

Alternately [H2b], however, opinion leadership may affect perceived informational utility *independent* of actual informational utility (Figure 1, Model B). This variant also may reflect opinion leaders' gatekeeping function and their tendency to consume an above-average volume of news.⁵⁵ An independent effect of opinion leadership on perceived informational utility suggests that opinion leaders discern informational utility in news that others evaluate as lacking such utility.

Third, opinion leadership may also affect news sharing after the informational utility of news is appraised. This variant reflects opinion leaders' increased sociability.⁵⁶ While both

opinion leaders and non-leaders perceive informational utility in some news, opinion leaders may be more likely than non-leaders to share this news, perhaps because of their increased social connections and outgoing temperament. The prediction, therefore, is that [H3] opinion leadership moderates the effect of perceived informational utility on news-sharing intention (Figure 1, Model C).

[Figure 1 about here]

These hypotheses were tested with two online survey experiments. Study 1 focused on the likelihood dimension of informational utility, employing technology- and household-oriented stimuli. These two news domains reside in non-overlapping opinion-leadership clusters, allowing an examination of domain-independent opinion leadership.⁵⁷ Study 2 focused on the immediacy and magnitude dimensions of informational utility.

Study 1

Methods. Overview and participants. The study had two conditions (actual informational utility: low vs. high; between subjects) predicting intention to share technology and household news. A panel of 270 U.S. social media users was accessed through Qualtrics, an online research firm, in summer 2012. This sample was 55% female, 19 to 83 years old ($M = 46.28$), majority white (81%; 7% black, 6% Latino), and above-average educated (16% high school diploma or less, 31% some college, 53% college graduate or higher).

Procedure and stimuli. Participants opted into the study by following a link from the panel vendor. Participants were randomly assigned to view, in random order, a technology article (low or high informational utility) and a household article (low or high informational utility). A questionnaire followed each article. On average, it took participants 12 minutes to complete the study. The University of Kansas committee on human subjects research (IRB) approved the

protocols and stimuli for both studies. Respondents viewed an informed consent statement on the first page of the study and prior to proceeding into the experiment. After finishing the questionnaire, respondents read a debriefing statement that disclosed the fictitious nature of the stimuli and provided additional information about the study.

Articles were threat-oriented and manipulated on the likelihood dimension. This approach resembled previous tests of informational utility in which the stimuli consisted of threat-oriented news items.⁵⁸ The technology article reported that Google's service fees will affect companies (low informational utility) or all Google users (high informational utility). The household article said that bedbugs do not threaten (low informational utility) or will infest most (high informational utility) American homes. Articles were displayed against a blank background with a newspaper logo in the top left and disabled social media buttons in the bottom left. Each article contained 120 words in four paragraphs, included one quote, and a six-word headline. The first 60 words reflected the informational utility manipulation; the last 60 words were constant within each domain. Stimuli were pretested iteratively with three samples of undergraduate students ($Ns = 134, 132, 128$), and fine-tuned to derive articles distinct on the manipulation-check measures. As in some of the other tests of informational utility, this study's stimuli were geographically independent to allow replication among general population samples.⁵⁹ See Appendix 1 for stimuli text.

Measures. See Table 1 for all measure wording and descriptive statistics. *Intention to share the news* was the dependent variable, consisting of an item indicating the likelihood of sharing the article using social media. *Actual informational utility* was a dichotomous variable (i.e., low, high) corresponding to the manipulation viewed. *Perceived informational utility* was measured using five items drawn from previous informational utility studies.⁶⁰ *Opinion*

leadership was measured with the Short Generalized Opinion Leadership scale.⁶¹ Daily social media use, familiarity with the story, familiarity with the story's subject, age, and education were the covariates.

[Table 1 about here]

Plan of analysis. Regression-based path analyses were conducted following recommended procedures for testing moderated mediation with the PROCESS macro for SPSS.⁶² Statistical inferences about indirect effects were based on PROCESS-estimated bootstrap confidence intervals using 1,000 bootstrap samples. Significance level was set at $p = .025$ to account for each respondent evaluating two stimuli.

The bottom panel of Figure 1 presents the constituent regression models of the hypothesized conceptual models. Note that Model A.1 consists of Model B.1 and an interaction term a_3 . Thus, Model A.1 was estimated first. If the a_3 interaction was nonsignificant, model B.1 was estimated, followed by model A.2/B.2. Models C.1 and C.2 were estimated last. Because the precise nature of the H1 mediation depended on the H2/H3 moderations (i.e., models A.1, B.1, C.2), H2/H3 results were addressed first, followed by H1 results.

Results. Manipulation checks showed that in both news domains, respondents agreed collectively that the situation in the low-informational utility news was less likely to have an effect than the situation in the high-informational utility news. See Table 1 for means and t -test results. Because of the conceptual similarity between actual and perceived informational utility, data were checked for evidence of multicollinearity. Although actual and perceived informational utility were correlated ($r_{\text{technology}} = .41$, $r_{\text{household}} = .37$), variance inflation factors (VIFs) did not exceed 1.5, suggesting that multicollinearity did not affect the regression estimates. Reflecting expectations from prior research, in models testing the independent total

effects of actual informational utility, opinion leadership, and covariates, actual informational utility was a statistically significant predictor of sharing technology news ($b = .64, SE = .23, p < .01$), and household news ($b = .77, SE = .21, p < .001$); and opinion leadership was a statistically significant predictor of sharing technology news ($b = .95, SE = .23, p < .01$) and household news ($b = 1.05, SE = .15, p < .001$).

[Table 2 about here]

Table 2 presents regression estimates for the substantive models. Technology news data supported H2a because the interaction path a_3 was statistically significant. The interaction is illustrated in Figure 2. Recall that the conceptual rationale for H2a suggested that those higher in opinion leadership would be more discriminating in their evaluations of informational utility. Empirically, this would be evidenced by an increasing effect of actual informational utility on perceived informational utility as opinion leadership increased. In contrast, Figure 2 shows a decreasing effect (difference between the two lines) as opinion leadership increases. The Johnson-Neyman technique identifies the moderator (i.e., opinion leadership) value at which the conditional effect transitions between statistical significance and nonsignificance.⁶³ This value was 4.41, suggesting that respondents who scored less than this value (out of five) on opinion leadership perceived a difference in the level of informational utility between the low- and high-informational utility technology articles. Those who scored above 4.41 on opinion leadership did not perceive a difference between low- and high-informational utility news. Because the direct effects on sharing intention from actual informational utility ($.088, p = .71$) and opinion leadership ($-.863, p = .15$) were not significant, it appeared that the effect of actual informational utility was fully mediated through perceived informational utility as moderated by opinion leadership.

[Figure 2 about here]

Household news data supported H2b because a_3 was nonsignificant and a_2 was significant (see Table 2). For household news, opinion leadership affected perceived informational utility independent of actual informational utility. Similar to technology news, respondents scoring high on opinion leadership perceived informational utility in news containing low and high actual informational utility.

Data for both technology and household news also supported H3 because the interaction paths b_3 were statistically significant. Figure 3 illustrates this interaction for technology news, showing an increasing likelihood of sharing high perceived-informational utility news as opinion leadership increases. The household news interaction was analogous (not shown).

H1, which predicted perceived informational utility mediating the effect of actual informational utility on news sharing, was supported for both technology and household news. For technology news, the conditional indirect effect of actual informational utility on intention to share was statistically significant within the range of opinion leadership values. A follow-up analysis of technology data showed both moderating effects of opinion leadership (i.e., a_3 and b_3) functioning simultaneously and independently.⁶⁴ For household news, the indirect effect of actual informational utility on news sharing through perceived informational utility ($a_1 \cdot b_1$) was .587 and statistically significant (CI: .390–.835); the indirect effect of opinion leadership ($a_2 \cdot b_1$) was also statistically significant (.220; CI: .054–.418). The corresponding direct effects were .179 (*n.s.*) and .828 ($p < .001$), meaning that for household news the effect of actual informational utility on sharing intention was fully mediated through perceived informational utility, and that the effect of opinion leadership on sharing intention was partially mediated through perceived informational utility.

[Figure 3 about here]

Study 2

While the first study tested the proposed news-sharing models with stimuli manipulated on the likelihood dimension of informational utility, the second study replicated Study 1 using the magnitude and immediacy dimensions of informational utility.⁶⁵

Methods. *Overview and respondents.* The study had two conditions (actual informational utility: low vs. high; between subjects), predicting intention to share immediacy-manipulated and magnitude-manipulated technology news. A panel of 275 U.S. social media users was accessed through Qualtrics in summer 2013. This sample was 51% female, 19 to 80 years old ($M = 51.67$), majority white (85%; 6% black, 2% Latino), and above-average educated (18% high school diploma or less, 26% some college, 57% college graduate or higher).

Other than the manipulated articles, all methods were identical to Study 1. Articles concerned technology news and reported on Google's service fees. Immediacy articles said fees may begin in 15 or 20 years (low informational utility) or that they are being implemented now (high informational utility). Magnitude articles said fees will not cost regular users (low informational utility), or that they will cost users hundreds of dollars (high informational utility). Each participant was randomly assigned to an immediacy- and a magnitude-manipulated article, in random order. The articles had been pretested at the same time and in the same manner as Study 1 articles. See Appendix 1 for article wording.

Results. Manipulation checks showed that respondents collectively found the high-immediacy news to be more urgent than the low-immediacy news, and the high-magnitude news to be more consequential than the low-magnitude news (see Table 1 for means and significance tests). Correlations between actual and perceived informational utility ($r_{\text{immediacy}} = .26$; $r_{\text{magnitude}} =$

.25) and VIFs (all < 1.2), suggested that multicollinearity was not a factor. Regressing intention to share on actual informational utility, opinion leadership, and the covariates showed that actual informational utility was a statistically significant predictor of sharing news that conveyed immediacy ($b = .65, SE = .23, p < .01$) and magnitude ($b = .88, SE = .22, p < .001$); and that opinion leadership was a statistically significant predictor of sharing news that conveyed immediacy ($b = .47, SE = .19, p < .05$) and magnitude ($b = .50, SE = .18, p < .01$).

The data did not support moderation effects (i.e., H2a, H3). For both manipulations, opinion leadership was statistically significant in Model B.1, supporting H2b. Table 3 shows the resulting regression estimates. For both manipulations, therefore, opinion leadership affected perceived informational utility independent of actual informational utility. H1 was supported for both manipulations: the indirect effect of actual informational utility on intention to share through perceived informational utility ($a_1 \cdot b_1$) was statistically significant for immediacy (.381, CI: .179–.644) and magnitude (.315, CI: .145–.557). The corresponding direct effects were .265 (*n.s.*) for immediacy, and .569 ($p < .01$) for magnitude. The indirect effect of opinion leadership on intention to share through perceived informational utility ($a_2 \cdot b_1$) was also statistically significant for immediacy (.237, CI: .079–.481) and magnitude (.154, CI: .003–.312). The corresponding direct effects were .231 ($p = .20$) for immediacy, and .349 ($p < .05$) for magnitude. Therefore, both effects relating to the immediacy-manipulated news were fully mediated through perceived informational utility. The effects were partially mediated for the magnitude-manipulated news.

[Table 3 about here]

Discussion

Online news consumers function as today's digital newsboys and newsgirls, using social media to distribute news among their online contacts. This study contributes to our understanding of the mechanisms that underlie the social sharing of online news by demonstrating how the informational utility of news and news consumers' opinion leadership jointly influence news sharing. First, results showed that on average, news consumers share news containing informational utility because they perceive this news to contain informational utility. While this finding may seem redundant, it becomes more meaningful when contrasted with the second research finding: opinion leaders tend to share news irrespective of informational utility because they discern informational utility even in news that, objectively speaking, lacks informational utility. These findings were consistent across two content domains and three informational-utility dimensions. Results for the likelihood dimension also showed that opinion leaders are more likely than non-leaders to share news that both leaders and non-leaders perceive to contain informational utility.

This study extends informational utility literature beyond the conventional domain of selective exposure⁶⁶ into the news-sharing process. The predictive strength of informational utility lies in its generalizability. The study's findings show that across unrelated content domains of technology news and household news, the informational utility expressed in a news story determines the extent to which readers share it with others. According to theoretical arguments, this happens because news containing informational utility contributes value to an online community.⁶⁷ Along with hedonic utility, which may account for humorous or off-beat news becoming viral,⁶⁸ informational utility appears to constitute a key ingredient of news that consumers readily share.

When connected with previous informational utility research, the study suggests that informational utility drives a double-selection process, wherein news consumers first expose themselves to news containing informational utility and then select high-informational utility news to share with others. Admittedly, the study leaves open the question whether informational utility's function in news sharing differs from its role in selective exposure. Future research may be directed to examining how informational utility facilitates these two selection processes.

Conventional informational utility research may benefit from integrating this study's distinction between actual and perceived informational utility. Perceived informational utility either fully or partially mediated the effect of actual informational utility on sharing intention for all of the study's stimuli. The study's findings additionally show that systematic cognitive differences in evaluating the informational utility of news can emerge when readers' personal characteristics, such as opinion leadership, are considered. The distinction between actual and perceived informational utility may help elucidate how subgroups select and consume news. For example, being predisposed to consuming news in a specific domain may increase the likelihood of finding informational utility in domain-specific news regardless of the informational utility that average readers perceive in the news, prompting amplified exposure. This may explain the process by which domain-specific opinion leaders attain information mastery in their specializations.

The study confirms that general opinion leadership—a collection of stable personality characteristics—distinguishes individuals with a propensity for sharing online information.⁶⁹ The findings thus fit with a venerable research tradition that identifies a class of individuals who exert a disproportionate amount of informational influence on those around them.⁷⁰ Despite the promises of social media to level the playing field for participation in various social, creative,

and political processes,⁷¹ this study's findings suggest that opinion leaders drive today's participatory journalism. Future work may examine the sharing habits of domain-specific opinion leaders⁷² and whether their inclination to share domain-specific news is similarly related to perceptions of informational utility.

The study makes a further contribution by identifying two pathways by which opinion leadership interfaces with informational utility to influence news sharing. These pathways reflect two sets of characteristics that distinguish opinion leaders: information gatekeeping and sociability. First, opinion leadership affected perceived informational utility, and subsequently news sharing, largely independent of actual informational utility. This finding fits with opinion leaders' higher-than-average news consumption: if they perceive informational utility in more news than average readers, they will consume more news than the average reader. This relationship also may be reciprocal: the more news opinion leaders consume, the more informational utility they may identify in news that average readers ignore. A precise interpretation of this finding and its corollaries, however, necessitates understanding opinion leaders' processing of informational utility.⁷³ If opinion leaders evaluate news carefully, their lack of distinction between low- and high-informational utility news may indicate a lower-than-average threshold for what constitutes informational utility. They may thus foresee kernels of informational utility in news that, most readers agree, lacks such utility. Alternately, opinion leaders may be relying on heuristics to ascribe informational utility to both low- and high-informational utility news. This would suggest that opinion leaders are poor arbiters of share-worthy content. Some research already questions whether self-designated opinion leaders are more knowledgeable about their specialties than non-leaders.⁷⁴ Finding that opinion leaders pay little attention to content before they evaluate it would denigrate further opinion leaders' position

as credible sources of information. Future work should examine more closely opinion leaders' processing of the informational utility of news.

The second pathway indicates that opinion leaders are more likely than non-leaders to share news they determine to contain informational utility. Because opinion leaders are predisposed to sociability and extroversion, they may create more opportunities for themselves than an average consumer to share news they perceive to have informational utility. This finding should be interpreted cautiously, however, as it was supported in only two of the four experimental manipulations. The analysis showed that both pathways functioned simultaneously, suggesting that under certain conditions opinion leaders share more news because they find that more news contains informational utility *and* because they are more willing to share high-informational utility news.

In light of previous research that identified various news-sharing motives (e.g., altruism, social engagement, self-expression),⁷⁵ this study suggests that the nature and strength of these motives may depend on the informational utility of specific news, on individual users' tendency toward opinion leadership, and on the joint influence of these two factors. Altruism, for example, may motivate the sharing of high-informational utility news regardless of opinion leadership, but serve as a significant predictor for the sharing of low-informational utility news only among opinion leaders. Structural variables such as users' attitudes about the usefulness and usability of news-sharing technologies also may combine with content and personality to prompt news sharing.⁷⁶ This study thus may inform future research to examine the variability in news-sharing motives related to specific content attributes and user personality characteristics.

Limitations. The demographics and self-selective nature of the respondent samples limit the study's generalizability. Racial/ethnic minorities and those with less than a college education

were underrepresented in the study's samples. Because socioeconomics and education relate to how individuals use online technologies,⁷⁷ this study's findings may not encompass fully American adults' perceptions of online news and their associated sharing behaviors. The use of solely threat-oriented and text-based stimuli limits the resulting understanding of informational utility's effect on news sharing. Future work should test news sharing with opportunity-oriented news and across multiple delivery channels.⁷⁸ Additionally, the novelty of topics presented in the stimuli may have elicited perceptions of informational utility among opinion leaders. Future work should include control conditions about news that lacks informational utility.

Implications for professional practice and future research. This study offers implications for practitioners in journalism, advertising, marketing, and public relations, who strive to maximize their consumers' online information sharing.⁷⁹ First, practitioners should capitalize on consumers' preference for messages they perceive to carry informational utility. Messages meant to be widely shared should unambiguously communicate information consumers perceive as valuable, useful, and important, which may reflect circumstances that will have an effect, materialize swiftly, or result in large consequences. Second, the study cautions that opinion leadership may function independently of objective message features, including the informational utility of messages. It may be beneficial, therefore, for communication-oriented organizations to cultivate a corps of opinion leaders whose sharing habits the organizations can guide to advance the organizations' and opinion leaders' communication goals.

Inconsistencies in findings between the likelihood dimension and the immediacy and magnitude dimensions of informational utility (i.e., H3) underscore the need for a better explication of informational utility. Conceptually, the immediacy and magnitude of a situation necessitate a situation taking place, suggesting the primacy of likelihood over the other two

dimensions. Prior work did not empirically establish the independence of these three dimensions, however. Research also may probe the psychological drivers like anxiety or anger, shown to be associated with news sharing,⁸⁰ which may underlie consumers' perceptions of informational utility. Work also may assess opinion leadership's interaction with other message features that drive news sharing, including, awe, positive and emotional language, interest, and surprise.

This study drew on the interactionist perspective in which environmental and individual characteristics combine to shape behavior. Bandura's interactionist model of triadic reciprocity further suggests reciprocal effects between behavior and environmental and individual characteristics.⁸¹ This model suggests, therefore, that opinion leadership and news-sharing tendencies may weaken or strengthen over time and in response to audience feedback. Future work thus may examine the longitudinal effects of news sharing on news consumers' personalities, their evaluations of informational utility, and their continued tendency to share news.

Table 1*Measure Wording and Descriptive Statistics (Study 1: N = 270; Study 2: N = 275)*

		Study	Manipulation	α	M	SD
Dependent variable						
<i>Intention to share the news</i>	How likely would you be to share this news story using social media (e.g., Facebook, Twitter, etc.)? [1 = “Very unlikely” ... 7 = “Very likely”]	1	Technology		3.76	2.14
			Household		3.36	1.95
		2	Immediacy		3.31	2.13
			Magnitude		3.28	2.08
Independent variable						
<i>Actual informational utility</i>	Coded dichotomously (0 = Low, 1 = High); see Appendix 1 for stimulus wording.					
Mediator						
<i>Perceived informational utility</i>	This news story was: (a) helpful, (b) important, (c) informative, (d) useful, (e) valuable. [1 = “Strongly disagree” ... 7 = “Strongly agree”]	1	Technology	.93	5.27	1.22
			Household	.94	4.95	1.30
		2	Immediacy	.94	4.76	1.41
			Magnitude	.95	4.87	1.36
Moderator / Independent variable						
<i>Opinion leadership</i>	(a) Among my friends and acquaintances, I often decide which issues are current. (b) My friends and acquaintances often discuss subjects that I brought up. (c) I usually succeed if I want to convince someone about something. (d) It is easy for me to influence other people. (e) I am often the one among my friends and acquaintances who has to approve important decisions. (f) I am often asked to make decisions for friends and acquaintances. (g) People in my social circle frequently act upon my advice. (h) I have the impression that I am regarded by my friends and acquaintances as a good source for tips and advice. (i) I often use	1		.92	3.23	.74
		2		.89	3.14	.64

Table 1, continued

		Study	Manipulation	α	M	SD
	my persuasive powers during discussions to reach agreements quickly. [1 = “Strongly disagree” ... 5 = “Strongly agree”]					
Covariates						
<i>Social media use</i>	On an average day, how much time do you spend using: (a) Facebook, (b) Twitter, (c) Google+, (d) Pinterest, (e) Reddit, (f) other. [Open-ended response fields for hours and minutes; summed into minutes]	1	(range: 2–1,215)		163.52	199.77
		2	(range: 2–1,905)		142.34	213.91
<i>Familiarity with the story</i>	How familiar were you with this story before reading it today? [0 = “Not familiar” ... 2 = “Very familiar”]	1	Technology		.28	.57
			Household		.79	.66
		2	Immediacy		.07	.27
			Magnitude		.07	.29
<i>Experience with the subject</i>	<i>Technology</i> : How often do you use Google? [0 = “Never,” 1 = “Sometimes,” 2 = “Always”]; <i>Household</i> : Have you or someone you know ever suspected or had a problem with bedbugs? [0 = “No,” 1 = “Yes, suspected,” 2 = “Yes, had a problem”]	1	Technology		1.27	.53
			Household		.46	.81
		2	Technology		1.16	.49
<i>Age</i>	What is your age?	1			46.28	14.57
		2			51.67	13.16
<i>Education</i>	What is your highest level of education? [1 = “Less than high school,” 2 = “High school diploma,” 3 = “Some college, no degree,” 4 = “Associate’s degree,” 5 = “Bachelor’s degree,” 6 = “Graduate school”]	1			3.93	1.33
		2			3.90	1.35

Table 1, continued

		Study	Manipulation	A	M	SD
Manipulation checks						
<i>Likelihood</i>	According to this news story, the situation described ... (a) May affect you, (b) Is likely to have an impact, (c) May influence your life. [1 = "Strongly disagree" ... 7 = "Strongly agree"]	1	Technology			
			Low (N=134)	.94	2.77	1.64
			High (N=136)		5.35	1.62
					t=13.00	
					p<.001	
			Household			
			Low (N=136)	.96	2.91	1.63
			High (N=134)		4.78	1.49
					t=15.75	
					p<.001	
Study 2						
<i>Immediacy</i>	(a) Is very rapid, (b) Is immediate, (c) Is slow to take effect [reversed], (d) Is happening now.	2	Low (N=139)	.91	1.93	1.11
			High (N=136)		4.69	1.18
					t=19.93	
					p<.001	
<i>Magnitude</i>	(a) Will have large consequences, (b) Won't have big repercussions [reversed], (c) Will really affect people, (d) Will be a serious problem.		Low (N=139)	.94	3.16	1.38
			High (N=136)		5.93	1.02
					t=18.84	
					p<.001	

Table 2*Ordinary Least Square Regression Coefficients for Study 1 (N = 270)*

	path	Technology			Household				
		Model	<i>b</i>	<i>SE</i>	<i>p</i>	Model	<i>b</i>	<i>SE</i>	<i>p</i>
Predicting: Perceived informational utility		A.1			B.1				
	Intercept		1.02	.52	.052		3.15	.49	<.001
	Actual informational utility	<i>a</i> ₁	2.23	.56	<.001		.91	.14	<.001
	Opinion leadership	<i>a</i> ₂	.75	.12	<.001		.34	.10	.001
	Actual informational utility × Opinion leadership	<i>a</i> ₃	-.40	.17	.017				
	<i>R</i> ²		.35				.21		
Predicting: Intention to share		A.2			B.2				
	Intercept		-.64	.75	.379		-.10	.61	.866
	Actual informational utility	<i>c</i>	-.01	.24	.984		.04	.21	.855
	Perceived informational utility	<i>b</i> ₁	.78	.10	<.001		.74	.08	<.001
	<i>R</i> ²		.32				.34		

continued next page

Table 2, continued

	path	Technology			Household				
		Model	<i>b</i>	<i>SE</i>	<i>p</i>	Model	<i>b</i>	<i>SE</i>	<i>p</i>
Predicting: Perceived informational utility		C.1				C.1			
	Intercept		3.32	.40	<.001		4.24	.37	<.001
	Actual informational utility		1.01	.13	<.001		.89	.15	<.001
	<i>R</i> ²		.23				.18		
Predicting: Intention to share		C.2				C.2			
	Intercept		3.06	1.96	.120		1.85	1.75	.291
	Actual informational utility		.09	.24	.711		.19	.20	.324
	Perceived informational utility	<i>b</i> ₁	-.24	.37	.509		-.18	.33	.579
	Opinion leadership	<i>b</i> ₂	-.86	.59	.147		-.51	.53	.341
	Perceived informational utility × Opinion leadership	<i>b</i> ₃	.28	.11	.012		.25	.10	.010
	<i>R</i> ²		.37				.44		

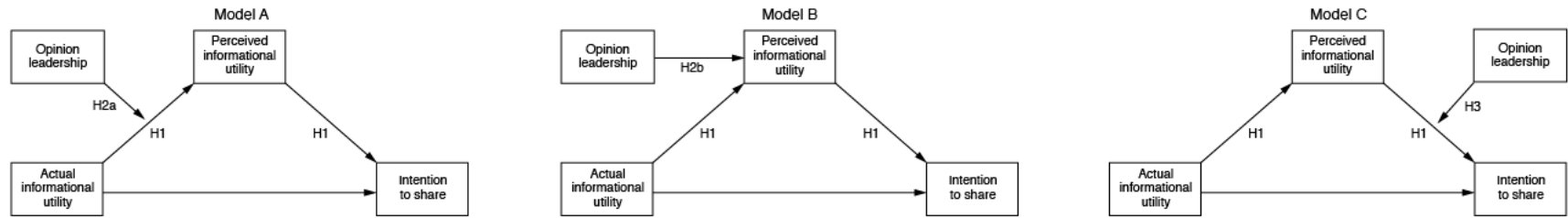
Note. Table omits covariates (social media use, familiarity with the story, familiarity with the subject, age, and education). Coefficients are unstandardized.

Table 3*Ordinary Least Square Regression Coefficients for Study 2 (N = 275)*

	path	Immediacy			Magnitude				
		Model	<i>b</i>	<i>SE</i>	<i>p</i>	Model	<i>b</i>	<i>SE</i>	<i>p</i>
Predicting: Perceived informational utility		B.1			B.1				
	Intercept		2.24	.64	.001		3.42	.64	<.001
	Actual informational utility	<i>a</i> ₁	.69	.16	<.001		.63	.16	<.001
	Opinion leadership	<i>a</i> ₂	.43	.13	.001		.31	.13	.02
	<i>R</i> ²		.17				.12		
Predicting: Intention to share		B.2			B.2				
	Intercept		.84	.79	.285		.29	.79	.715
	Actual informational utility	<i>c</i>	.25	.22	.264		.60	.22	.006
	Perceived informational utility	<i>b</i> ₁	.58	.08	<.001		.53	.08	<.001
	<i>R</i> ²		.33				.33		

Note. Table omits covariates (social media use, familiarity with the story, familiarity with the subject, age, and education). Coefficients are unstandardized.

Conceptual Models



Constituent Regression Models

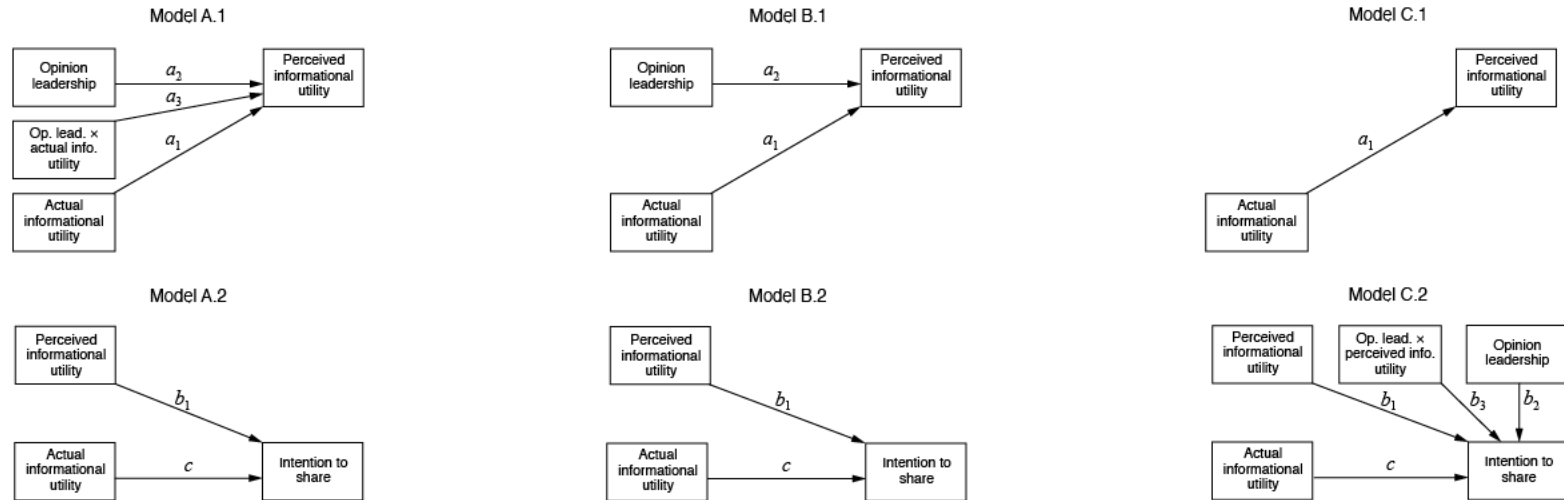


Figure 1. Proposed conceptual models (top panel) and corresponding regression models (bottom panel), showing perceived informational utility mediating the effect of actual informational utility on intention to share. Opinion leadership may moderate this mediation (Models A and C), or affect it independently of actual informational utility (Model B).

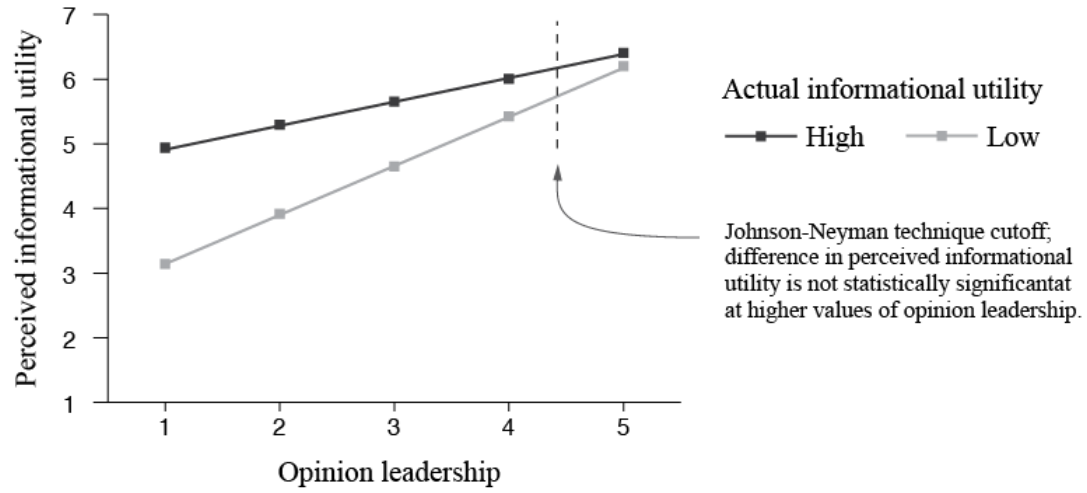


Figure 2. Estimates of perceived informational utility as a function of opinion leadership and actual informational utility, Study 1 technology manipulation.

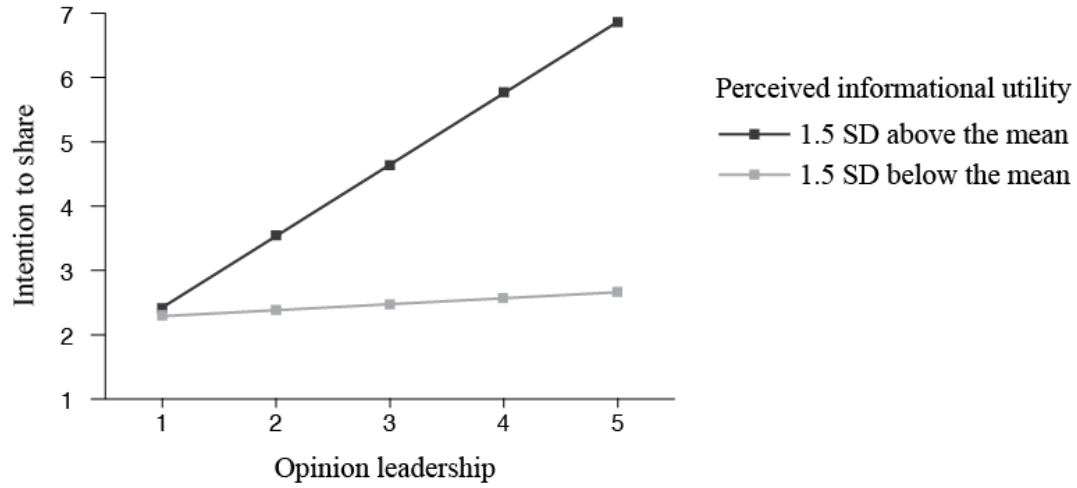


Figure 3. Estimates of intention to share as a function of opinion leadership and perceived informational utility, Study 1 technology manipulation. Nature of the interaction was analogous for household manipulation.

Endnotes

- ¹ Kenny Olmstead, Amy Mitchell, and Tom Rosenstiel, “Navigating News Online: Facebook is Becoming Increasingly Important,” *The Pew Research Center’s Project for Excellence in Journalism*, May 9, 2011 [http://www.journalism.org/analysis_report/facebook_becoming_increasingly_important] (Jan. 21, 2012).
- ² Olmstead, Mitchell, and Rosenstiel, “Navigating News Online.”
- ³ Kristen Purcell, Lee Rainie, Amy Mitchell, Tom Rosenstiel, and Kenny Olmstead, “Understanding the Participatory News Consumer: How Internet and Cell Phone Users Have Turned News into a Social Experience,” *Pew Internet and American Life Project*, March 1, 2010 [<http://www.pewinternet.org/Reports/2010/Online-News.aspx>] (Jan. 21, 2012); Katerina Eva Matsa and Amy Mitchell, “8 Takeaways about Social Media and News,” *State of the News Media 2014, Pew Research Journalism Project*, March 28, 2014 [<http://journalism.org/2014/03/26/8-key-takeaways-about-social-media-and-news>] (April 9, 2014).
- ⁴ Axel Bruns, *Blogs, Wikipedia, Second Life, and Beyond: From Production to Produsage* (NY: Peter Lang, 2008).
- ⁵ David Domingo, Thorsten Quandt, Ari Heinonen, Steve Paulussen, Jane B. Singer, and Marina Vujnovic, “Participatory Journalism Practices in the Media and Beyond: An International Comparative Study of Initiatives in Online Newspapers,” *Journalism Practice* 2 (3, 2008): 326–342.
- ⁶ Alfred Hermida, Fred Fletcher, Darryl Korell, and Donna Logan, “Share, Like, Recommend,” *Journalism Studies* 13 (5–6, 2012): 815–824.

-
- ⁷ Kanghui Baek, Avery Holton, Dustin Harp, and Carolyn Yaschur, “Links That Bind: Uncovering Novel Motivations for Linking on Facebook,” *Computers in Human Behavior* 27 (2011): 2243–2248.
- ⁸ John H. Parmelee and Shannon L. Bichard, *Politics and the Twitter Revolution: How Tweets Influence the Relationship between Political Leaders and the Public* (Lanham, MD: Lexington Books, 2012).
- ⁹ Thorsten Hennig-Thurau, Kevin P. Gwinner, Gianfranco Walsh, and Dwayne D. Gremler, “Electronic Word-of-Mouth Via Consumer-Opinion Platforms: What Motivates Consumers to Articulate Themselves on the Internet?,” *Journal of Interactive Marketing* 18 (1, 2004): 1–13; Joseph E. Phelps, Regina Lewis, Lynne Mobilio, David Perry, and Niranjana Raman, “Viral Marketing or Electronic Word-of-Mouth Advertising: Examining Consumer Responses and Motivations to Pass Along Email,” *Journal of Advertising Research* 10 (December 2004): 1–17.
- ¹⁰ Hennig-Thurau et al., “Electronic Word-of-Mouth Via Consumer-Opinion Platforms.”
- ¹¹ Hennig-Thurau et al., “Electronic Word-of-Mouth Via Consumer-Opinion Platforms”; Shintaro Okazaki, “Social Influence Model and Electronic Word of Mouth PC Versus Mobile Internet,” *International Journal of Advertising* 28 (3, 2009): 439–472; Jason Y.C. Ho and Melanie Dempsey, “Viral Marketing: Motivations to Forward Online Content,” *Journal of Business Research* 63 (2010): 1000–1006.
- ¹² Okazaki, “Social Influence Model and Electronic Word of Mouth.”
- ¹³ Ho and Dempsey, “Viral Marketing: Motivations to Forward Online Content.”
- ¹⁴ Denis McQuail, “With More Hindsight: Conceptual Problems and Some Ways Forward for Media Use Research,” in *Action Theory and Communication Research: Recent Developments*

-
- in Europe*, eds. Karsten Renckstorf, Denis McQuail, Judith Rosenbaum, and Gabi Schaap (NY: Mouton de Gruyter, 2004), 35–50.
- ¹⁵ Thomas F. Stafford, Marla Royne Stafford, and Lawrence L. Schkade, “Determining Uses and Gratifications for the Internet,” *Decision Sciences* 2 (2, spring 2004): 259–288; Daniel Hunt, David Atkin, and Archana Krishnan, “The Influence of Computer-Mediated Communication Apprehension on Motives for Facebook Use,” *Journal of Broadcasting & Electronic Media* 56 (2, 2012): 187–202.
- ¹⁶ Kurt Lewin, *A Dynamic Theory of Personality: Selected Papers* (NY: McGraw-Hill, 1935); Albert Bandura, *Social Foundations of Thought and Action: A Social Cognitive Theory* (Englewood Cliffs, NJ: Prentice Hall, 1986).
- ¹⁷ Bandura considered media content (i.e., message features) to be an environmental characteristic (*Social Foundations of Thought and Action*, p. 24).
- ¹⁸ Pablo J. Boczkowski and Eugenia Mitchelstein, “How Users Take Advantage of Different Forms of Interactivity on Online News Sites: Clicking, E-Mailing, and Commenting,” *Human Communication Research* 38 (1, 2012): 1–22.
- ¹⁹ Jonah Berger and Katherine L. Milkman, “What Makes Online Content Viral?” *Journal of Marketing Research* 49 (April 2012): 192–205.
- ²⁰ Brian E. Weeks and R. Lance Holbert, “Predicting Dissemination of News Content in Social Media: A Focus on Reception, Friending, and Partisanship,” *Journalism & Mass Communication Quarterly* 90 (2, summer 2013): 212–232.
- ²¹ Lewis R. Goldberg, “An Alternative ‘Description of Personality’: The Big-Five Factor Structure,” *Journal of Personality and Social Psychology* 59 (6, 1990): 1216–1229; Oliver P. John, Laura P. Naumann, and Christopher J. Soto, “Paradigm Shift to the Integrative Big Five

-
- Trait Taxonomy: History, Measurement, and Conceptual Issues,” in *Handbook of Personality: Theory and Research*, eds. Oliver P. John, Richard W. Robins, and Lawrence A. Pervin (NY: Guilford, 2008), 114–158.
- ²² Hung-Chang Chiu, Yi-Ching Hsieh, Ya-Hui Kao, and Monle Lee, “The Determinants of Email Receivers’ Disseminating Behaviors on the Internet,” *Journal of Advertising Research* 10 (December 2007): 1–12.
- ²³ Charles K. Atkin, “Instrumental Utilities and Information Seeking,” in *New Models of Communication Research*, ed. Peter Clarke (Beverly Hills, CA: Sage, 1973), 205–242; Charles K. Atkin, “Informational Utility and Selective Exposure to Entertainment Media,” in *Selective Exposure to Communication*, ed. Dolf Zillmann and Jennings Bryant (Hillsdale, NJ: Lawrence Erlbaum, 1985), 63–91; Dolf Zillmann, “Mood Management in the Context of Selective Exposure Theory,” in *Communication Yearbook 23*, ed. Michael E. Roloff (Thousand Oaks, CA: Sage, 2000), 103–123.
- ²⁴ Matthias R. Hastall, “Informational Utility as Determinant of Media Choices,” in *Media Choice: A Theoretical and Empirical Overview*, ed. Tilo Hartmann (NY: Routledge, 2009), 149–166.
- ²⁵ Silvia Knobloch, Francesca Dillman Carpentier, and Dolf Zillmann, “Effects of Salience Dimensions of Informational Utility on Selective Exposure to Online News,” *Journalism & Mass Communication Quarterly* 80 (1, 2003): 95. Emphasis in original.
- ²⁶ Silvia Knobloch, Dolf Zillmann, Rhonda Gibson, and James A. Karrh, “Effects of Salient News Items on Information Acquisition and Issue Perception,” *Zeitschrift für Medienpsychologie* 14 (1, 2002): 14–22; Silvia Knobloch-Westerwick, Francesca Dillman Carpentier, Andree Blumhoff, and Nico Nickel, “Selective Exposure Effects for Positive and

Negative News: Testing the Robustness of the Informational Utility Model,” *Journalism & Mass Communication Quarterly* 82 (1, 2005): 181–195; Silvia Knobloch-Westerwick, Matthias Hastall, Daniela Grimmer, and Julia Brück, “Informational Utility: Der Einfluss der Selbstwirksamkeit auf die selektive Zuwendung zu Nachrichten” [“Informational Utility: The Influence of Self-Efficacy on the Selective Attention to News”], *Publizistik* 50 (4, 2005): 462–474; Francesca R. Dillman Carpentier, “Applicability of the Informational Utility Model for Radio News,” *Journalism & Mass Communication Quarterly* 85 (3, 2008): 577–590; Laura M. Arpan and Firat Tüzünkan, “Photographic Depiction of Normative Deviance and Informational Utility as Predictors of Protest News Exposure, Related Perceptions, and Story Comprehension,” *Mass Communication and Society* 14 (2, 2011): 178–195.

²⁷ Knobloch et al., “Effects of Salient News Items on Information Acquisition and Issue Perception”; Knobloch, Carpentier, and Zillmann, “Effects of Salience Dimensions of Informational Utility on Selective Exposure to Online News”; Knobloch-Westerwick et al., “Selective Exposure Effects for Positive and Negative News”; Carpentier, “Applicability of the Informational Utility Model for Radio News.”

²⁸ Hastall, “Informational Utility as Determinant of Media Choices”; Knobloch-Westerwick et al., “Informational Utility.”

²⁹ Carl Hovland, Irving Janis, and Harold Kelley, *Communication and Persuasion: Psychological Studies of Opinion Change* (New Haven, CT: Yale University Press, 1953).

³⁰ Knobloch et al., “Effects of Salient News Items on Information Acquisition and Issue Perception”; Knobloch, Carpentier, and Zillmann, “Effects of Salience Dimensions of Informational Utility on Selective Exposure to Online News”; Carpentier, “Applicability of the Informational Utility Model for Radio News.”

-
- ³¹ Ronald Rogers, "A Protection Motivation Theory of Fear Appeals and Attitude Change," *Journal of Psychology* 91 (1975): 93–114; Donna L. Floyd, Steven Prentice-Dunn, and Ronald W. Rogers, "A Meta-Analysis of Research on Protection Motivation Theory," *Journal of Applied Social Psychology* 30 (2, 2000): 407–429.
- ³² Ben F. McMath and Steven Prentice-Dunn, "Protection Motivation Theory and Skin Cancer Risk: The Role of Individual Differences in Responses to Persuasive Appeals," *Journal of Applied Social Psychology* 35 (3, 2005): 621–643.
- ³³ Arthur C. Graesser, Murray Singer, and Tom Trabasso, "Constructing Inferences During Narrative Text Comprehension," *Psychological Review* 101 (3, 1994): 371–395; Frank R. Kardes, Steven S. Posavac, and Maria L. Cronley, "Consumer Inference: A Review of Processes, Bases, and Judgment Contexts," *Journal of Consumer Psychology* 14 (3, 2004): 230–256.
- ³⁴ McMath and Prentice-Dunn, "Protection Motivation Theory and Skin Cancer Risk."
- ³⁵ Gary Lee Keck and Barbara Mueller, "Intended vs. Unintended Messages: Viewer Perceptions of United States Army Television Commercials," *Journal of Advertising Research* 34 (2, March/April 1994): 70–78.
- ³⁶ Chiu et al., "The Determinants of Email Receivers' Disseminating Behaviors on the Internet"; Berger and Milkman, "What Makes Online Content Viral?."
- ³⁷ Sridhar Balasubramanian and Vijay Mahajan, "The Economic Leverage of the Virtual Community," *International Journal of Electronic Commerce* 5 (3, 2001): 103–138; Chiu et al., "The Determinants of Email Receivers' Disseminating Behaviors on the Internet."
- ³⁸ Berger and Milkman, "What Makes Online Content Viral?."
- ³⁹ Chiu et al., "The Determinants of Email Receivers' Disseminating Behaviors on the Internet."

-
- ⁴⁰ Berger and Milkman, “What Makes Online Content Viral?”
- ⁴¹ Paul F. Lazarsfeld, Bernard Berelson, and Hazel Gaudet, *The People’s Choice: How the Voter Makes Up His Mind in a Presidential Campaign* (NY: Columbia University Press, 1944), 49.
- ⁴² Robert K. Merton, *Social Theory and Social Structure: Toward the Codification of Theory and Research* (Glencoe, IL: Free Press, 1957); Lawrence F. Feick and Linda L. Price, “The Market Maven: A Diffuser of Marketplace Information,” *Journal of Marketing* 51 (January 1987): 83–97; Gabriel Weimann, *The Influentials: People Who Influence People* (NY: State University of New York Press, 1994); Timo Gnams and Bernard Batinic, “Convergent and Discriminant Validity of Opinion Leadership: Multitrait-Multimethod Analysis Across Measurement Occasion and Informant Type,” *Journal of Individual Differences* 32 (2, 2011): 94–102; Timo Gnams and Bernard Batinic, “Evaluation of Measurement Precision with Rasch-type Models: The Case of the Short Generalized Opinion Leadership Scale,” *Personality and Individual Differences* 50 (1, 2011): 53–58.
- ⁴³ Carolyn A. Lin, “A Paradigm for Communication and Information Technology Adoption Research,” in *Communication Technology and Society: Audience Adoption and Uses*, eds. Carolyn A. Lin and David J. Atkin (Cresskill, NJ: Hampton Press, 2002): 447–475; Everett M. Rogers, *Diffusion of Innovations*, 5th edition (NY: Free Press, 2003).
- ⁴⁴ Bruns, *Blogs, Wikipedia, Second Life, and Beyond*; Clay Shirky, *Cognitive Surplus: Creativity and Generosity in a Connected Age* (NY: Penguin Press, 2010).
- ⁴⁵ Yair Amichai-Hamburger and Gideon Vinitzky, “Social Network Use and Personality,” *Computers in Human Behavior* 26 (2010): 1289–1295; Pavica Sheldon, “Voices that Cannot Be Heard: Can Shyness Explain How We Communicate on Facebook versus Face-to-face?,” *Computers in Human Behavior* 29 (2013): 1402–1407.

-
- ⁴⁶ Michelle F. Wright and Yan Li, “The Associations between Young Adults’ Face-to-face Prosocial Behavior and Their Online Prosocial Behaviors,” *Computers in Human Behavior* 27 (2011): 1959–1962.
- ⁴⁷ Tao Sun, Seounmi Youn, Guohua Wu, and Mana Kuntaraporn, “Online Word-of-Mouth (or Mouse),” *Journal of Computer-Mediated Communication* 11 (2006), 1104–1127; Chiu et al., “The Determinants of Email Receivers’ Disseminating Behaviors on the Internet”; Okazaki, “Social Influence Model and Electronic Word of Mouth”; Ho and Dempsey, “Viral Marketing.”
- ⁴⁸ Thomas W. Valente and Patchareeya Pumpuang, “Identifying Opinion Leaders to Promote Behavior Change,” *Health Education & Behavior* 34 (December 2007): 881–896; Anja Wiesner, *Opinion Leadership and Influence in Online Environments* (Ph.D. dissertation, University of Erlangen-Nuremberg, 2009).
- ⁴⁹ Steven A. Baumgarten, “The Innovative Communicator in the Diffusion Process,” *Journal of Marketing Research* 12 (February 1975): 12–18; Dhavan V. Shah and Dietram A. Scheufele, “Explicating Opinion Leadership: Nonpolitical Dispositions, Information, Consumption, and Civic Participation,” *Political Communication* 23 (2006): 1–22.
- ⁵⁰ Marsha L. Richins and Teri Root-Shaffer, “The Role of Involvement and Opinion Leadership in Consumer Word-of-Mouth: An Implicit Model Made Explicit,” *Advances in Consumer Research* 15 (volume 1, 1988): 32–36.
- ⁵¹ Elihu Katz and Paul F. Lazarsfeld, *Personal Influence: The Part Played by People in the Flow of Mass Communications* (NY: Free Press, 1955); Feick and Price, “The Market Maven”; Gabriel Weimann, “The Influentials: Back to the Concept of Opinion Leaders?,” *Public Opinion Quarterly* 55 (1, 1991): 267–279; Weimann, *The Influentials*; Ed Keller and Jon

Berry, *The Influentials* (NY: Free Press, 2003); Shah and Scheufele, “Explicating Opinion Leadership”; Gnambs and Batinic, “Convergent and Discriminant Validity of Opinion Leadership.”

⁵² Weimann, *The Influentials*.

⁵³ Gnambs and Batinic, “Convergent and Discriminant Validity of Opinion Leadership.”

⁵⁴ Feick and Price, “The Market Maven”; Weimann, *The Influentials*; Keller and Berry, *The Influentials*; Shah and Scheufele, “Explicating Opinion Leadership.”

⁵⁵ Weimann, *The Influentials*; Keller and Berry, *The Influentials*; Shah and Scheufele, “Explicating Opinion Leadership.”

⁵⁶ Weimann, *The Influentials*; Keller and Berry, *The Influentials*; Gnambs and Batinic, “Convergent and Discriminant Validity of Opinion Leadership.”

⁵⁷ Weimann, *The Influentials*, 277.

⁵⁸ Knobloch et al., “Effects of Salient News Items on Information Acquisition and Issue Perception”; Knobloch, Carpentier, and Zillmann, “Effects of Salience Dimensions of Informational Utility on Selective Exposure to Online News.”

⁵⁹ Knobloch et al., “Effects of Salient News Items on Information Acquisition and Issue Perception”; Carpentier, “Applicability of the Informational Utility Model for Radio News.”

⁶⁰ Knobloch, Carpentier, and Zillmann, “Effects of Salience Dimensions of Informational Utility on Selective Exposure to Online News”; Carpentier, “Applicability of the Informational Utility Model for Radio News.”

⁶¹ Gnambs and Batinic, “Evaluation of Measurement Precision with Rasch-type Models.”

⁶² Andrew F. Hayes, *Introduction to Mediation, Moderation, and Conditional Process Analysis: A Regression-Based Approach* (NY: Guilford Press, 2013).

-
- ⁶³ Hayes, *Introduction to Mediation, Moderation, and Conditional Process Analysis*.
- ⁶⁴ Hayes, *Introduction to Mediation, Moderation, and Conditional Process Analysis*, p. 454.
- ⁶⁵ Knobloch et al., “Effects of Salient News Items on Information Acquisition and Issue Perception”; Knobloch, Carpentier, and Zillmann, “Effects of Salience Dimensions of Informational Utility on Selective Exposure to Online News”; Knobloch-Westerwick, “Selective Exposure Effects for Positive and Negative News”; Carpentier, “Applicability of the Informational Utility Model for Radio News.”
- ⁶⁶ Knobloch et al., “Effects of Salient News Items on Information Acquisition and Issue Perception”; Knobloch, Carpentier, and Zillmann, “Effects of Salience Dimensions of Informational Utility on Selective Exposure to Online News”; Knobloch-Westerwick, “Selective Exposure Effects for Positive and Negative News”; Carpentier, “Applicability of the Informational Utility Model for Radio News”; Arpan and Tüzünkan, “Photographic Depiction of Normative Deviance and Informational Utility.”
- ⁶⁷ Chiu et al., “The Determinants of Email Receivers’ Disseminating Behaviors on the Internet.”
- ⁶⁸ Chiu et al., “The Determinants of Email Receivers’ Disseminating Behaviors on the Internet.”
- ⁶⁹ Sun et al., “Online Word-of-Mouth (or Mouse)”; Chiu et al., “The Determinants of Email Receivers’ Disseminating Behaviors on the Internet”; Okazaki, “Social Influence Model and Electronic Word of Mouth”; Ho and Dempsey, “Viral Marketing.”
- ⁷⁰ Lazarsfeld, Berelson, and Gaudet, *The People’s Choice*; Katz and Lazarsfeld, *Personal Influence*; Weimann, *The Influentials*.
- ⁷¹ Bruns, *Blogs, Wikipedia, Second Life, and Beyond*; Shirky, *Cognitive Surplus*.
- ⁷² Merton, *Social Theory and Social Structure*; Katz and Lazarsfeld, *Personal Influence*; Leisa Reinecke Flynn, Ronald E. Goldsmith, and Jacqueline K. Eastman, “Opinion Leaders and

Opinion Seekers: Two New Measurement Scales,” *Journal of the Academy of Marketing Science* 24 (number 2, 1996): 137–147.

- ⁷³ Shelly Chaiken and Yaacov Trope, eds., *Dual-Process Theories in Social Psychology* (NY: Guilford Press, 1999).
- ⁷⁴ Sabine Trepte and Helmut Scherer, “Opinion Leaders – Do They Know More than Others about Their Area of Interest?,” *Communications: The European Journal of Communication Research* 35 (2010): 119–140.
- ⁷⁵ Hennig-Thurau et al., “Electronic Word-of-Mouth Via Consumer-Opinion Platforms”; Phelps et al., “Viral Marketing or Electronic Word-of-Mouth Advertising”; Okazaki, “Social Influence Model and Electronic Word of Mouth”; Baek et al., “Links That Bind.”
- ⁷⁶ Sylvia Chan-Olmsted, Hyejoon Rim, and Amy Zerba, “Mobile News Adoption among Young Adults: Examining the Roles of Perceptions, News Consumption, and Media Usage,” *Journalism & Mass Communication Quarterly* 90 (1, 2013): 126–147.
- ⁷⁷ Eszter Hargittai, “Digital Na(t)ives? Variation in Internet Skills and Uses among Members of the ‘Net Generation,’” *Sociological Inquiry* 80 (2010): 92–113.
- ⁷⁸ Carpentier, “Applicability of the Informational Utility Model for Radio News.”
- ⁷⁹ Jim Sterne, *Social Media Metrics: How to Measure and Optimize Your Marketing Investment* (NY: John Wiley & Sons, 2010); Jason Falls, “The Guesswork of Determining Influence,” *Communication World* 28 (1, 2011): 14–19.
- ⁸⁰ Berger and Milkman, “What Makes Online Content Viral?.”
- ⁸¹ Bandura, *Social Foundations of Thought and Action*.