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The Roles of Interpersonal Communication in Mass Media Campaigns

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Communication scholarship has witnessed an explosion of disciplinary divisions and specific topic interest groups in the past 50 years that represents either noteworthy maturation or a troubling splintering, depending on your vantage point. As a result, important intersections remain for us to explore. In this review, we seek to highlight connections between interpersonal communication and mass media campaigns by identifying related streams of research that help us to explain how and why interpersonal talk and mass media efforts routinely affect each other. In doing so, we identify three general categories of roles of interpersonal communication: (planned or unintended) media campaign outcome, mediator of media campaign effects, and moderator of campaign effects.

The Roles of Interpersonal Communication in Mass Media Campaigns

Half a century ago, Katz and Lazarsfeld's (1955) *Personal Influence* presaged the trajectory of late twentieth-century mass communication research and its move away from an assumption that mass media messages dictate people's behavior directly. In that frequently cited volume, they noted that information often does not flow from media outlets directly to audience members, but instead travels via intermediary opinion leaders. In doing so, they highlighted the importance of understanding interpersonal communication in order to grasp media effects.

In recent decades, a diverse array of scholars has continued to acknowledge that engagement with mass media does not occur in a vacuum free of interpersonal networks. Researchers voicing such a stance range from Katz and Lazarsfeld (1955) and other sociologists such as Wright (1986) to political scientists, such as Druckman and Nelson (2003), to critical theorists, such as Hagen and Wasko (2000), to health communication campaign evaluators (e.g., Hornik, 1989; Hornik et al., 2000; T. Korhonen, Uutela, H. Korhonen, & Puska, 1998). Despite this widespread acknowledgment, however, our discipline lacks a systematic review of the specific potential roles that interpersonal interaction can play with regard to mass media campaign effects.

We can attribute this gap in knowledge partially to a divide that has existed for decades between interpersonal communication researchers and those focused on mass media effects. In this chapter, we begin to bridge these areas of research by discussing the (potential and documented) roles of interpersonal communication in media effects that relate to strategic campaigns. While our ultimate attention concerns the impact of conversation for campaign efforts, we draw, by

necessity, from a range of scholarship on human engagement with media content and the potential influence of talking with other people before, after, or during that process.

In order to accomplish these tasks, we begin by addressing fundamental questions about the nature of interpersonal communication, and we locate it in the past century's work on information flow among mass audiences. That discussion provides a foundation upon which we can explore three specific roles for interpersonal interaction: as an outcome of campaign effects, as a mediator of campaign effects, and as a moderator of campaign effects. We then highlight what we know about each of the roles that talk might play and about key limitations. We focus largely on issues related to media-based political advocacy, health promotion, and science communication because several keenly relevant and illustrative examples lay in those domains. At the same time, we also intend our discussion to be applicable to scholars studying mass communication, interpersonal communication, language and social interaction, organizational communication, public relations and advertising, and social networks.

Conceptualizing Interpersonal Communication and Mass Media Campaigns

Ultimately, we seek to bolster our understanding of why media campaigns experience varying degrees of success and the role of interpersonal communication in those efforts. To establish necessary foundation for that exploration, we start by clarifying key terms.

Interpersonal Communication

In their review of interpersonal communication research, Roloff and Anastasiou (2001) speculated that "interpersonal communication researchers will increasingly tie their scholarship to the significant issues facing society" (p. 65). By moving beyond assessment of isolated dyadic experience to place interpersonal communication in a larger context, researchers can acknowledge both the ways in which the environment affects such interaction and the ways in which understanding interpersonal communication can help illuminate macrolevel patterns of information flow.

Approximately two decades ago, however, Cappella (1987) noted the importance, and difficulty, of defining interpersonal interaction. Given the range of scholarly approaches to interpersonal communication, Roloff and Anastasiou (2001) acknowledged that "we are doubtful that there will ever be consensus about a definition of the field or a central theory" (p. 65). Indeed, in his more recent review of theorizing on interpersonal communication, Berger (2005) noted that "[i]t is possible to organize theoretical activity within the interpersonal communication domain into at least six distinct areas" (p. 417).

Because a complete exploration of the many orientations to interpersonal communication extends beyond the scope of this review, we focus here on two key characteristics of interpersonal communication that are most central to this chapter.[1] In particular, we suggest that interpersonal communication is consequential behavior and that it occurs in diverse contexts. (Admittedly, we also largely focus here on conversation between two people rather than the full array of phenomena that might fall under the heading of interpersonal communication.)

Interpersonal Communication as Consequential Behavior   According to Cappella (1987), interaction occurs when person A's trajectory of behavior is influenced by person B over and above the behavior that we would expect based on baseline data from person A. Although interpersonal communication can yield both intended and unintended outcomes, it necessarily involves mutually co-oriented participants and affects those participants' choices for subsequent actions (see foundational work by Watzlawick, Bavelas, & Jackson, 1967, as well as an excellent survey of this body of research in Knapp & Daly, 2002).

As such, conversation not only constitutes a mechanism for information repetition and exposure among participants, but it also comprises a relatively complex dyadic or group variable likely to be influenced by an array of factors that relate to human needs and desires and environmental constraints (e.g., Berger, 2002; Daly, 2002; Dillard, Anderson, & Knobloch, 2002; Poole, McPhee, Canary, & Morr, 2002; Walther & Parks, 2002, as well as related review by Roloff & Anastasiou, 2001). Most importantly, we regard conversation not just as simple information delivery between people but rather as relationally and socially consequential behavior, albeit sometimes in response to evolving circumstances as conversations unfold (see related arguments by Berger, 2005). Moreover, those exchanges can happen in a variety of contexts.

An Array of Contexts for Interpersonal Communication   Although early research on interpersonal communication focused on face-to-face interaction (see Knapp, Daly, Albada, & Miller, 2002), many agree that interpersonal communication can occur in a variety of settings. In light of this idea, scholars have begun to explore similarities and differences among and between those communication contexts, as discussed later. Whether those differences matter for campaigns, however, is of central concern here.

With the dawn of the Internet, a number of scholars have investigated online communication (e.g., Baym, Zhang, & Lin, 2004; Herring, 1999; Price & Cappella, 2002; Price, Nir, & Cappella, 2006; Walther & Parks, 2002; Weger & Aakhus, 2003; see also discussion in review by Berger, 2005). For example, Duffy, Smith, Terhanian, and Bremer (2005) sought to elucidate differences between online and face-to-face survey data, and Matsuba (2006) distinguished between face-to-face and online relationships. That range of work suggests online communication itself is not monolithic and comprises several categories of interaction. Herring, for example, delineated between chat and more gradual sequences of bulletin board postings or e-mail exchanges.

Following her assessment of numerous chat streams, Herring (1999) also concluded that online chat, one example of online communication, is often incoherent and disjointed. Yet, Baym and colleagues (2004) reported that college students perceived Internet-based conversation as only slightly lower in quality than face-to-face interaction. Moreover, Papacharissi (2005) made a similar point in her review of online interaction scholarship, claiming that both online and face-to-face interactions reflect human needs and desires and thus are not necessarily distinct.

In light of these ideas, the question of whether the range of available interpersonal communication contexts matters merits empirical exploration, especially in terms of mass media effects. Available evidence suggests that both online and face-to-face interaction can affect outcomes that matter to mass communication scholars. For example, Price, Cappella, and Nir (2002) discovered that online dialogue conducted through a WebTV project appeared to facilitate opinion change, just as face-to-face discussion sometimes can. Hardy and Scheufele (2005) directly compared the effects of reported face-to-face discussion about politics and relevant computer-mediated interactions such as chat and found similar effects in both cases. As a result, it appears that we can now find conversation occurring

between people in a variety of contexts and that many of these contexts might yield effects worthy for our consideration of how talk relates to media campaigns.

Mass Media   Defining mass media can involve a relatively simple exercise in listing types of information technologies (e.g., newspapers, radio, or television). Even in recent years, many introductory textbooks (e.g., Turow, 2003; Vivian, 2006) have continued to organize chapters in this way. Such categorization, however, has lost some of its utility in the face of contemporary blurring of boundaries between media types in terms of modes of information presentation and organizational ownership (see related arguments by Rayner, 2006). Bryant and Miron (2004) have observed:

> For example, (a) all of the media of mass communication are undergoing dramatic changes in form, content, and substance … (b) newer forms of interactive media … are altering the traditional mass communication model from that of communication of one-to-many to communication of many-to-many … (c) media ownership patterns are shifting dramatically … (d) the viewing patterns and habits of audiences worldwide are changing so rapidly to be almost mercurial. (p. 662)

Chaffee and Metzger (2001) openly asked recently whether we were witnessing the "end of mass communication" (p. 365). The answer to that question is not a definite yes. Instead, perhaps we are experiencing an explosion of alternatives and possibilities for mass media (see Rayner, 2006, and review by Rubin & Haridakis, 2001). Even the authors of Web logs, or blogs, typically seek to maintain a mass audience of sorts, though, of course, they do not often attain it (Lawson-Borders & Kirk, 2005). According to Rubin and Haridakis, "[N]ewer media have mass, interpersonal, organizational, political, economic, and cultural dimensions" (p. 73).

Whether we are witnessing the end of mass media organizations in general, then, is an open question. Economic considerations alone suggest that audiences will continue to be massive for the foreseeable future, even if they have decreased in size somewhat (Webster, Phalen, & Lichty, 2000). Moreover, if we consider mass communication from a functional perspective, as advocated by Wright (1986), mass media institutions will not likely fade for reasons of obsolescence (see review by Roessler, this volume). Mass media serve and address mass audiences, and that relationship will likely continue in some form, especially as available technology continues to evolve.

Mass Media Campaigns

Use of mass media for strategic campaigns boasts a history almost as long as the history of mass media technologies. This section situates campaigns as strategic enterprises that can address specific social issues.

Campaigns as Strategic Enterprises   As Paisley (1989) observed, the story of campaigns in the United States can be traced back to numerous examples in the eighteenth and nineteenth centuries. In fact, individuals were attempting to influence others' behavior through media messages even before 1776. In the 1720s, Cotton Mather attempted to promote inoculation during Boston's smallpox epidemic, in part through the distribution of pamphlets that highlighted the effectiveness of immunization. Later, in the nineteenth century, Paisley noted that a variety of social change organizations attempted to reach mass audiences through print media. The abolitionist movement, which sought to eliminate slavery, actively printed material intended to change beliefs and attitudes toward the practice and succeeded in that approach, incurring the wrath of protesters who destroyed printing facilities. Undoubtedly, such strategic use of media played an important role in shifting public opinion at the time.

Rogers and Storey (1987) noted that planners intend campaigns to generate specific outcomes or effects among a relatively large group of people through an organized set of communication activities, usually within a specific period of time. Such efforts are not the sole domain of advertisers. Public relations specialists, for example, conventionally conceptualize mass media campaigns as part of their work, for they perceive campaigns as time-limited efforts to present a limited set of messages intended to affect audience beliefs (see Coombs, 2001; Heath, 2001; Vasquez & Taylor, 2001). Whether promoting a corporate image (Pinkleton & Austin, 2006) or a nonprofit agenda, such as that of Planned Parenthood (Bostdorff, 1992), public relations professionals have routinely conducted organized efforts in this vein.

Contemporary media campaigns have featured advertisements, public service announcements, and, more recently, Internet-based tools and other interactive digital applications. Trammell, Williams, Postelnicu, and Landreville (2006), for example, noted the rise of candidate Web sites and Web logs in political campaigns (see also Taylor, Kent, & White, 2001). In the health domain, interactive video

comprises an increasingly popular campaign tool. Interactive video, in a sense, can take the form of an educational movie that allows an audience partially to control its part in that movie. Read and his colleagues (2006), for example, recently demonstrated that men potentially at risk for HIV infection reduced risky sexual behaviors after they participated in an interactive video intervention more than men who were not assigned to watch the treatment.

The Varied Foci of Media Campaigns   Media campaigns have been conducted around the globe in the past century for a variety of persuasive purposes. Examples include electoral campaigns in the world's democracies (Bolivar, 2001; Trent & Friedenberg, 2000) and efforts to organize populations for political action other than going to the polls, such as public opinion in the context of national referendums in the European Union (de Vreese & Semetko, 2004) or mobilization in the People's Republic of China in the second half of the twentieth century (Latham, 2000).

Yet another critical focus of campaigns concerns health outcomes, particularly those that result from risk behaviors associated with public health threats. Rogers and colleagues, for example, described at least two radio campaigns in Tanzania: the Mtu ni Afya ("Man Is Health") health literacy project in the early 1970s (Rogers & Storey, 1987) and the Twende na Wakati ("Let's Go With the Times") family planning project in the 1990s (Vaughan & Rogers, 2000). Hornik and colleagues (2000) reported on the National Youth Anti-Drug Media Campaign in the United States; Mudde and de Vries (1999) addressed a multimedia smoking cessation campaign in the Netherlands, and Wellings (2002) discussed mass media safer sex campaigns in Europe and noted six different countries where mass media campaigns contributed to increased condom use.

Wellings' (2002) analysis, in fact, reflects a critical explanation for the popularity of mass media campaigns. Organizations pay for campaigns based on their potential to foster obvious and consequential behavior change. At the same time, this contention has not been accepted universally, given a long-standing debate on the actual potential for campaigns to affect audiences in this way. In fact, during the last five decades, the prevailing view of the impact of campaigns has evolved from a so-called limited effects view to a period of renewed confidence in campaigns and, more recently, to a view of

likely effects as moderate and nuanced (Maibach, 1993; Roberts & Maccoby, 1985; Wallack, 1990).

H. Mendelsohn (1973), for example, refuted skepticism about campaigns by observing that earlier studies did not find mass media campaign effects because, among other reasons, campaigns often did not target relevant factors, and evaluation research unrealistically attempted to demonstrate immediate, large, and direct campaign effects on behavior. Fifteen years later, Rogers and Storey (1987) fine-tuned Mendelsohn's contention by observing that many successful campaigns share an ability to induce interpersonal communication about the campaign topic, an intermediate outcome that, in turn, might affect behavioral outcomes. Here we see one of the many important connections between the interpersonal and campaign literatures relevant to our discussion.

Indeed, a number of scholars writing about strategic communication in recent years have drawn a connection to interpersonal scholarship. Based on their state of the discipline review of public relations scholarship, for example, Botan and Taylor (2004) argued that "[t]he most striking trend in public relations over the past 20 years … is its transition from a functional perspective to a cocreational one" that emphasizes the role of publics in creating shared meaning (p. 651). They also argued that "public relations scholars have revisited interpersonal communication to understand relationship building better" (p. 652; see also Taylor et al., 2001; Vasquez & Taylor, 2001).

Moreover, such a general emphasis on the necessity of treating individuals as part of social groups and networks in order to understand media effects actually fits with a wide array of scholarship beyond campaign evaluation, including research on interpretive communities (e.g., Aden, Rahoi, & Beck, 1995; Fish, 1980; Lindlof, 1988). Lindlof, for example, argued that interpretation of media content is at least partly a function of community membership. Accordingly, campaign material interpretation might be a partial function of community interaction. How community members collectively engage a campaign might tell us much about the ultimate success of that effort. A better understanding of mass media campaign effects requires consideration of the relationship between interpersonal communication and the sharing (and co-construction) of information from media campaigns.

Interpersonal Communication and Information Flows

In this section, we discuss the roots of intersections between interpersonal communication and media effects. In that vein, we begin with a brief overview of the long history of investigation of talk as a vital part of the information flow process. We will not focus exclusively on campaign research in this section. Instead, we set the stage for our later discussion by exploring how sociologists, epidemiologists, and mass communication scholars have traced information spread.

The Two-Step Flow and Diffusion Research

Katz and Lazarsfeld (1955), unsurprisingly, offer an appropriate starting point in terms of scholarship, if not purely in terms of chronology. Drawing upon earlier speculation by Lazarsfeld, Berelson, and Gaudet (1944), Katz and Lazarsfeld asserted that interpersonal conversation mediates between the general broadcast of information and individual engagement of and action upon that information. Specifically, these researchers observed the pivotal role played by opinion leaders as individuals who both engage news and elite media sources and, in turn, dispense information from those sources to their networks of followers. Scholars subsequently extended the original notion of a two-step flow by pointing to the possibility of a multistep flow; however, the basic idea remains as a prominent account of media effects (see Brosius and Weimann, 1996, or Katz, 1987, for further discussion).

Following in the wake of this initial observation, one important strain of related scholarship has been work to model the spread of ideas among populations. A variety of scholars have applied the idea that information could be traced from media through various interpersonal pathways to a host of studies that might be characterized as diffusion research. One actually can trace the intellectual roots of most diffusion studies back much further than the Katz and Lazarsfeld (1955) book. For example, early observations by Tarde (1903) at the end of the nineteenth century on imitation and the spread of ideas shed light on the notion that the social nature of humans and their tendency to converse offer a key route for information diffusion. In the early twentieth century, numerous examples emerged of information quickly spreading via interpersonal channels, including

telephone conversations. For example, Scanlon (1998) noted how quickly news of the 1917 Halifax explosion spread across Canada, at least in part as telephone switchboards lit up.

Thinking about which channels promote information spread also predates *Personal Influence*. As DeFleur (1987) noted, several studies in the *American Sociological Review* in the 1940s and 1950s provided a complicated array of evidence on this issue. D. C. Miller (1945), for example, claimed that more than 90% of a college student population heard about the death of U.S. President Franklin D. Roosevelt within a half hour of official news reports, a phenomenon that he attributed to the quick spread of news through interpersonal channels. Somewhat contrasting evidence about channel roles, however, can be found in Larsen and Hill's (1954) study of how people in the U.S. state of Washington found out about the death of Ohio Senator Robert Taft. In the Taft case, individuals cited radio, rather than word of mouth, as their source of information.

As DeFleur (1987) observed, even this simple contrast suggested that the spread of ideas and information cannot be treated as a uniform phenomenon. Different contexts and circumstances likely contribute to diverse patterns of information spread, and individual-level variables also potentially play a role. Recognition of such complexity, in turn, inspired a generation of diffusion studies (e.g., DeFleur & Larsen, 1958; Rogers, 1962; Rosengren, 1973) that sought to go beyond simple documentation of information spread to understandings about who adopts innovative beliefs and how exactly certain innovations gain prominence after their initial introduction.

Rogers's (1962) famous volume, called simply *Diffusion of Innovations*, focused squarely on the question of whether individuals vary in their openness to new information. In that initial volume, Rogers answered that question affirmatively. He demonstrated individual-level variance in the time required for agricultural innovation adoption among individuals. In turn, he characterized people as being more or less likely to adopt particular innovations.

Later work on diffusion and, in some ways, even Rogers's later editions (1995 or 2003) have tended to focus less on characterizing individual receptivity, instead explicitly tracking information flow through social networks. Recently, Fan and Yu (2005) even questioned whether we need—and attempted to refute empirically—an assumption of individual difference in openness to new ideas in order to explain patterns of information spread. Milgram's (1967)

study on the small-world phenomenon indicated that impressive information flows often involve only a limited number of communication agents. On a similar plane, Granovetter (1974) determined that important outcomes—for example, getting a job—more often occur through communication with other network members than through direct exposure to formal information sources. Such studies have fueled other research that has approached information flow from a perspective more akin to epidemiological studies of infection. For example, Valente (1995) emphasized the utility of understanding social networks for studying diffusion, a point emphasized in his recent collaborations (e.g., Schuster et al., 2006). We can expect information to spread most quickly when established social connections exist among members of a population.

Under some circumstances, social networks can even offer a powerful rival to media outlets. Rawan (2001) highlighted the example of Iran in the 1970s, where information crucial to the Iranian Revolution of 1979 spread largely through social networks connected to mosques rather than through electronic media channels controlled by the Shah regime. In fact, Rawan suggested that the Shah government may not have fully grasped the importance of such traditional and oral means of communication. More recently, in a piece on political information flow, de Vreese and Boomgaarden (2006) contended that interpersonal channels might matter more than media exposure for questions of opinion change among "politically sophisticated" individuals (p. 19).

Such ideas have penetrated the thinking of marketing research as well. Reingen and Kernan (1986) explored the importance of referral networks for marketing outcomes. Recent popular writing on the notions of viral marketing (Rosen, 2002) or "word-of-mouth epidemics" (Gladwell, 2000, p. 32) also clearly takes a cue from earlier scholarly thinking about the relevance of infection models for communication campaigns. The core message of such marketing tomes and popular commentary is that information spread might mimic other natural patterns, such as the spread of disease.

Clearly, then, thinking on diffusion has evolved to produce a range of studies. This research includes both studies of technological or behavioral innovation diffusion and of news diffusion, which DeFleur (1987) argued represent two distinct bodies of work. After all, the spread of a piece of information likely entails a simpler process than the widespread adoption of a behavior, a process undoubtedly

underpinned by changes in knowledge and beliefs but nonetheless at least a step removed from simply hearing about a particular idea or news item.

Beyond Information Flow: Other Roles
for Interpersonal Communication

Whether people largely learn new information about specialized topics from talking with other people in their social networks or they primarily seek information about topics so that they might talk with other people, of course, also remains an open question. Interpersonal communication is not always particularly informative per se. Sometimes it constitutes a ritualistic activity for which people undoubtedly draw upon information from media but through which people do not necessarily transmit and learn large volumes of completely new information. As such, pure diffusion notions do not sufficiently account for all conversations relevant to mediated information.

Eveland (2004) cautioned against assuming that interpersonal interaction always acts as a diffusion mechanism, suggesting that interpersonal communication can be related to key variables such as knowledge without necessarily serving as a link through which new information flows. In reviewing relevant political communication research (e.g., Lenart, 1994; Scheufele, 2002), Eveland noted at least three plausible explanations for the documented relationship between knowledge about politics and talk about politics: simple exposure (consistent with the aforementioned notion of a two-step flow), anticipatory elaboration, and discussion-generated elaboration. According to Eveland, a simple exposure explanation suggests that talking with a person exposes others to information to which that person has been exposed; one person passes information to the next. Elaboration explanations offer a somewhat different account of the process. In a situation of anticipatory elaboration, people are motivated to process political information from news content more deeply when they anticipate impending conversations with others. In slight contrast to anticipatory elaboration, Eveland argued that discussion-generated elaboration focuses on information processing at the actual time of the conversation in question.

Using data from U.S. election surveys, Eveland (2004) found the most support for the elaboration explanations, suggesting that

people prepare for talk by elaborating on information and also that discussion itself encourages information elaboration. Anticipation of future conversations, as well as actual discussion with others, apparently can affect engagement with mass media. The simple exposure account, however, was largely not supported. While Eveland discovered a positive relationship between political discussion and political knowledge, he did not identify any additional boost in knowledge from speaking with a relatively knowledgeable partner.

Eveland's (2004) work does not suggest that the two-step flow account of the relationship of mass communication and interpersonal communication is not plausible under some circumstances, of course. Instead, it suggests that we need to take the nature of the discourse in question into account before estimating the potential for relevant interpersonal communication to act as a conduit for information and knowledge gain. Sometimes, anticipated interaction prompts media use and information seeking—as in the case in which individuals want to be prepared to talk with a relative with whom they always disagree politically—rather than acting as a source of new information.

With these distinctions in mind, we now turn our attention to the various roles that interpersonal communication might play with specific regard to media campaigns. In looking at organized efforts to use media to affect behavior, we argue that information diffusion comprises but one part of the picture. We need to understand how talk between individuals affects, and is affected by, campaign efforts to change or reinforce behavior.

Interpersonal Communication as an Outcome of Campaign Exposure

Is there a connection between media campaign exposure and people's tendency to talk to each other? When would we expect people to talk with others about what they have encountered while engaging media content? Why would people bother discussing media content in the first place?

These specific questions are not new. Roughly two decades ago, G. R. Miller (1986) noted "a neglected connection" (p. 132) between mass media exposure and interpersonal communication. Simply seeing a television advertisement will not always lead a person to

talk with his or her friends about it, and yet we also know that people sometimes discuss such ads (e.g., Hornik & Yanovitzky, 2003), just as they interact with other media programming (e.g., Rogers et al., 1999). Sometimes, these instances are the intentional consequence of planned campaign efforts; in other cases, people share information that they have gleaned from media sources in ways that campaign staff might view as undesirable. Here we can ask what types of content generate talk and under what circumstances this happens.

Interpersonal Communication as a Planned Outcome

Direct-to-consumer advertising of prescription drugs (DTCA) provides a good example of campaigns that aim to induce conversation. Health insurance regulations in the United States have reduced patient voice in prescription decision making. As a result, DTCA campaigns in recent years have taken advantage of loosened requirements to directly urge patients to talk with their doctor in order to obtain the prescription for the advertised drug (Lyles, 2002). (Whether that effort is ethical or helpful for broader society, of course, remains an open question.)

In recent decades, a number of health promotion efforts also have attempted to engage social networks as a part of their strategies. Kelly et al. (1992) adapted the notion of opinion leaders to the realm of HIV prevention. For example, Kelly and colleagues found evidence that so-called popular people often served as vital network hubs in urban homosexual communities and thus assisted with the endorsement and spread of prevention skills information and risk information. By identifying and working directly with those opinion leaders rather than solely broadcasting messages, Kelly and others concluded that interpersonal communication can be an important tool. Moreover, their work suggests that some individuals might be more well connected to others and also more likely to talk actively with them about media content than their peers.

In many ways, such efforts extend aforementioned thinking about the diffusion of innovations. Singhal and colleagues (e.g., Singhal & Rogers, 2003; Svenkerud, Singhal, & Papa, 1998) have demonstrated the extent to which early enthusiasm for the diffusion of innovation approach has been translated in recent decades into health campaign efforts around the globe. Svenkerud et al., for example,

offered a relevant review of efforts in Thailand to curb the spread of HIV/AIDS. They claimed that targeted social networks made a vital difference between relatively successful intervention efforts and less successful activities in Bangkok. Efforts to work with respected and influential housewives in Bangkok's Klong Toey neighborhoods appeared more effective than attempts to collaborate with motorcycle taxi drivers. Both housewives and taxi drivers often spoke with other people, but housewives could be perceived as hubs in more well-established social networks. Moreover, Svenkerud et al. determined that housewives enjoyed greater reputations of credibility among their conversation partners than taxi drivers. As such, efforts to employ social networks for diffusion efforts cannot be treated as equal. We need to consider the context and nature of those networks in understanding the role of interpersonal communication in health promotion.

In addition to our earlier examples, a number of media-based strategic communication efforts have attempted to stimulate conversation as an outcome (e.g., Afifi et al., 2006; Hafstad & Aaro, 1997; Hornik et al., 2000; Piotrow, Kincaid, Rimon, & Rinehart, 1997; Rogers et al., 1999). The development of conversational skills has been an explicit goal of numerous media campaigns. According to Hornik et al., a major strategy of the U.S. Office of National Drug Control Policy's national media campaign against marijuana use in the late 1990s and early 2000s involved facilitating interactions between parents and their teenage children about drugs. In that case, campaign planners hoped to encourage parents who found themselves unmotivated to talk with their children about drugs or unsure of their ability to do so. Teaching people how to discuss sensitive topics has also been an explicit goal of many organ donation efforts. For example, Afifi and colleagues claimed that organized campaign efforts to prompt family discussion about organ donation could be improved by paying closer attention to the ways in which families seek and share information.

Reasons Why People Talk About Campaigns

Some of the extant research on mass media prompting of interaction suggests specific ways that such content can facilitate talk. Hafstad and Aaro (1997) documented an antismoking campaign in Norway that employed provocative, emotional appeals in order to stimulate

conversation among adolescent viewers and their peers. According to Hafstad and Aaro, such efforts assume that people (and perhaps specifically adolescents) tend to tell their friends, family, and neighbors about particularly startling media content that they encounter to establish community boundaries and interpersonal bonding. Further, G. R. Miller (1986) proposed that media exposure might serve either to dampen or spur conversation by affecting conversational competency and providing fodder for dialogue.

Previous research suggests that motivations for conversation vary. To harness motivations for campaign purposes, we need frameworks with which to predict conversational occurrence. A functional view of interpersonal conversation as exchange between two or more people can guide our search for a general theory of circumstances in which talk should stem from media exposure. People talk with each other for a variety of specific reasons, ranging from strategic identity management to persuasion of others to simple task accomplishment (Berger, 1995; Seibold, Cantrill, & Meyers, 1985).

Strack and Deutsch (2004) noted in their exhaustive review that social behavior results from both reflective consideration (of beliefs about the behavior in question) and impulsive processes (that involve immediate spreading activation of readily available schemata in the brain in response to stimuli). Initiation of interpersonal communication, as a social behavior, sometimes will reflect reasoning about its utility (e.g., consideration of whether to ask someone to go to dinner) and other times simply constitute a reaction stemming from biological need (e.g., asking for food when desperately hungry).

With regard to reflective consideration, frameworks for understanding and predicting behavior such as Fishbein's (2000; see also Fishbein & Yzer, 2003) integrated model of behavior prediction, which builds upon the earlier theory of reasoned action (Fishbein & Ajzen, 1975; Ajzen & Fishbein, 1980) and theory of planned behavior (Ajzen, 1991) are useful. From this perspective, social behavior (such as interpersonal communication) ultimately extends from attitudinal, normative, and efficacy beliefs that people hold about performing that behavior. Campaign content might variously affect those beliefs and thus spur conversation.

Whether media campaign messages can sometimes act in such a manner, then, is a suitable topic for exploration here. Yzer, Siero, and Buunk's (2001) work on discussing condom use with a new partner offers relevant evidence in this regard. Importantly, Yzer

and associates carefully distinguished the act of bringing up con-
dom use with a partner from other behaviors, such as actual con-
dom use. Moreover, after modeling such conversation as a function
of intention and past behavior, they specifically highlighted the indi-
rect role that conversational *norms*—or perceptions that important
others value and condone talking about a particular topic—play in
encouraging talk. Insofar as conversational norms are vulnerable to
campaign efforts, such work allows us to assess the types of messages
that might be most useful in facilitating conversation on this topic.

Perceived efficacy to engage in conversation comprises another
factor relevant under this general framework. Experiencing some
types of educational media content might boost one's own sense of
topical understanding and conversational competency. By exten-
sion, if exposure raises a person's confidence (accurately or not) in
their ability to understand and talk about a particular topic, then, all
else being equal, we can expect that talk about that topic will be more
likely to ensue, a claim for which Southwell and Torres (2006) found
some recent support.

Southwell and Torres (2006) evaluated a media-based project
specifically focused on bolstering conversational competence about
science, engineering, technology, and mathematics. Experimental
data from that study demonstrated that science news exposure can
indirectly affect conversation about science by bolstering perceived
understanding of science. Southwell and Torres recruited regu-
lar television news viewers from a midsize designated market area
(a television viewing area) in the United States using random digit
dialing and randomly assigned them to one of three science news
exposure conditions. As hypothesized, science television news expo-
sure appeared to boost perceived ability to understand science. In
addition, perceived ability to understand science predicted conversa-
tions about science, suggesting that perceived understanding of science
acts as a partial mediator of the relationship between media exposure
and subsequent conversation about science and technology.

In short, then, we would expect interpersonal communication to
stem from media exposure when that content affects perceptions of
the personal utility and value of interacting with others on a topic or
changes perceptions of one's conversational abilities. Media content
might spur persons to learn more, empower them with information
they feel compelled to share with others, loosen normative constraints
on talking about taboo subjects, or even affect their perception that

they can engage in conversation. At the same time, campaigns also might affect such perceptions in unintended fashion.

Unintended Talk About Campaign Content

People can talk about media campaign content in a way not intended by campaign planners. For example, Visser and Mirabile's (2004) work underscores the idea that diffusion-through-social-network approaches harbor important limitations and weaknesses. They demonstrated that communication between network members about attitude objects actually negatively impacted persuasion efforts. In attitudinally congruent networks (i.e., networks in which most members hold similar preexisting views), resistance to persuasion attempts was stronger than in attitudinally incongruent networks, suggesting that the strength of ties among network members may actually pose a barrier to campaign attempts in some cases.

Conversation in networks might help a person to assess his or her original opinion rather than simply to provide new information from a campaign (Festinger, 1950). To inform diffusion-through-social-network approaches more effectively, we need to better understand the circumstances under which individuals resist and respond adversely to the network majority (Visser & Mirabile, 2004), an opinion leader (Katz & Lazarsfeld, 1955), or referents who are not very influential network members (Granovetter, 1973).

David, Cappella, and Fishbein (2006) highlighted another prime example of how interpersonal communication can undermine campaign persuasion goals. David and colleagues studied interaction about campaign messages with an experimental design in which they assigned some participants to chat with other participants in an online chat forum following exposure to antidrug campaign advertisements. In this case, again, group discussion apparently functioned in a way not anticipated by campaign planners.

Participants assigned to talk with others actually reported attitudes and normative beliefs more strongly in favor of marijuana use than their counterparts who simply watched the ads. According to David et al. (2006), individuals most likely to process antidrug ads in a biased fashion also tended to speak up in group discussions. As a result, many of the comments in the group discussions favored drug use. Consequently, participants exposed to such discussions heard

numerous prodrug viewpoints, a pattern that affected both attitudinal and normative perceptions. For example, individuals experimentally assigned to discuss the ads subsequently reported more normative pressure to use marijuana.

As David et al. (2006) discovered, discussion can, at times, be an uncooperative partner for campaign planners. Even if a campaign manages to generate conversation, campaign staff cannot guarantee that resulting talk will coincide with campaign goals, especially when recipients engage in biased processing of campaign materials. Regardless, we should consider alternative reactions to all campaigns, particularly those that intentionally strive to generate conversation.

In addition, a tangential but undoubtedly relevant area of research involves work on rumor or gossip. Research on rumors extends back at least to Allport and Postman's (1947) classic book, *The Psychology of Rumor*, in which they point to the perceived relevance and importance of a topic and the ambiguity of available information as predictors of the likelihood of a rumor spreading. Rosnow (1991, 2001) took this view further to suggest that people generate or spread rumors as a means of coping with anxiety or uncertainty. Rumors essentially constitute stories or embellishments that help to explain uncertain situations and provide a rationale for behavior. As Allport and Postman (1946/1947) observed in an early article in *Public Opinion Quarterly*, rumors can function to relieve urges, justify feelings, and explain circumstances. Walker and Gibbons (2006) recently reached a similar conclusion. As a result, we can predict that rumor creation and spread constitutes a relatively frequent phenomenon in human experience (see also Grey, this volume, for discussion of societal trauma).

Interpersonal communication about rumors can occur in face-to-face contexts, but, building on our earlier discussion, little reason exists to restrict our attention there. In fact, investigation of the spread of rumors on the Internet (e.g., Bordia & DiFonzo, 2004) represents an important new area of inquiry. One might even argue that the availability of the Internet has quickened the pace of rumor-mongering and extended the geographic reach of rumors to an extent that the spread of rumors now rivals resource-limited campaign efforts as an information source in some circumstances. Richardson (2005), writing about the global information environment in the wake of discovering severe acute respiratory syndrome (SARS) in Asia a few years ago, noted that the architecture of the

Internet facilitated publication of a wild array of conspiracy theories and general hyperbole through newsgroups and blogs. According to Richardson, for a short period of time, official Web sites, such as that of the World Health Organization, were isolated hubs of balanced information amid a wider information environment awash in inaccurate information.

How might rumors be related to organized campaign efforts? In short, we might expect rumors to arise, and potentially to act as impediments, under certain conditions. The importance of ambiguity and uncertainty in the emergence and spread of rumors suggests that certain types of campaign efforts are particularly likely to be plagued. Specifically, instances in which campaign officials are unable or unwilling to provide key pieces of information seem ripe for rumor mongering. In the aforementioned SARS case documented by Richardson (2005), Chinese government officials could have moved more quickly to stem the rising tide of rumors. Scanlon (1977) also documented this phenomenon in his description of post-disaster rumor chains.

Disaster communication, then, in which officials use mass media to organize populations for evacuation or to communicate other public health and safety messages, is likely to be especially vulnerable (see Gale, 1987; Sood, Stockdale, & Rogers, 1987). The 2005 experience in the United States with Hurricane Katrina or the 2004 earthquake recovery efforts in south and southeastern Asia highlight the vital role that short-term communication campaigns could play if successfully implemented to move people and keep them away from certain harms. Such efforts nonetheless must contend with public discussion and interpretation as people hear official announcements and then seek to fill in the information gaps left open by the incomplete nature of those announcements.

Interpersonal Communication as Mediator of Campaign Effects

If campaigns can generate talk, for better or worse, then it also makes sense for us to consider the possibility that such conversations, in turn, can spur desired behaviors among audiences. If that is the case, we can consider conversations also to serve sometimes as a mediating link between campaign exposure and particular campaign goals. In light of that possibility, even if campaign planners do not explicitly

attempt to generate talk, campaign evaluators should consider the potential role of interpersonal communication in explaining campaign effects, an argument largely consistent with recent prominent calls to reassess evaluation design (e.g., Hornik & Yanovitzky, 2003; Valente & Saba, 2001).

In simplest terms, interpersonal conversation can potentially extend necessary message reach and frequency—particularly important when advertising budgets are not spectacularly high. On a different plane, campaign-induced conversation might also lead to social norm discovery that indirectly leads to behavior change. We discuss support for both possibilities later, especially in the specific realm of health and science communication.

Parrott (2004) has gone so far as to suggest that the recent lack of focus on interpersonal communication as a potential explanation for outcomes represents an important oversight by health campaign scholars. Talk with others, after all, appears to be an important part of the array of channels claimed by individuals as influential with regard to science and health decision-making (Morton & Duck, 2001; O'Keefe, Ward, & Shepard, 2002; Trumbo, 1998; Wilkin & Ball-Rokeach, 2006). O'Keefe and colleagues, for example, found that landowners in Wisconsin tended to rely on a diverse set of information sources, sometimes including only conversation with other people who kept track of the news, in monitoring developments related to the local watershed. Wilkin and Ball-Rokeach found that Latinos in Los Angeles reported interpersonal networks of friends and family to be important sources of health information, along with health professionals and media content specifically designed for them. The question, however, is whether such dependence on interpersonal channels might be tapped to facilitate indirect campaign effects.

In proposing their model of health campaign effects in the context of illicit drug use, Hornik and Yanovitzky (2003) discussed at least two plausible ways in which conversation could serve as a mediator. Each of these paths pertains to the specific case of the antidrug campaign that they highlight and also more broadly to our general discussion. At the community level, Hornik and Yanovitzky pointed to the possibility of "social diffusion" of campaign messages (p. 215), paralleling the core ideas suggested by our earlier discussion of the two-step flow and diffusion traditions: Information plausibly flows from mass media through individuals and on to other individuals who interact with the initially exposed. In this way, interpersonal

communication serves as an exposure bridge that facilitates exposure of a large part of community to key campaign messages.

At the same time, Hornik and Yanovitzky (2003) stressed another mediation possibility at the individual level by noting the possibility that campaign exposure might lead a person to talk with others about campaign messages and to discover normative support (or lack thereof, in an alternate case) for campaign-relevant behaviors. By acting as a conversational prompt, campaigns might lead individuals to find out that others support particular health behaviors more than they originally supposed and thus indirectly encourage behavior change.

Some recent empirical evidence from the health campaign literature coincides with this possibility. Valente and Saba (1998, 2001) assessed a mid-1990s contraceptive promotion campaign in Bolivia. They argued strongly in favor of acknowledging the role that social networks play in information diffusion. They also presented evidence from the Bolivian case that illustrates a positive link between media campaign exposure and change over time in perceptions that other people in particular social networks actually use contraceptives. This potential norm discovery or norm sensitization effect echoes Hornik and Yanovitzky's (2003) contentions. (Whether media exposure alone might be sufficient to boost perceptions of social norms or whether such exposure prompts actual conversations that, in turn, boost perceptions of relevant norms, of course, remain open questions, though the two possibilities also are not mutually exclusive.)

The possibility of a mediating role for interpersonal communication in explaining campaign effects holds important implications for the practice of campaign evaluation. Envisioning interpersonal communication as at least a partial mediator suggests that we need to track whether a campaign stimulates some of those exposed to converse with others about the campaign. In all likelihood, not all conversation partners receive direct messages from campaigns. Some learn about it through conversation.

Typical campaign evaluations, however, find a measure of exposure to the campaign and simply correlate it with outcome variables, such as knowledge, beliefs, and attitudes. Do and Kincaid (2006), for example, looked at the relationship between viewing of an entertainment-education program, relevant knowledge, and health clinic visits in Bangladesh without explicit consideration of conversation. Researchers in such situations tend to classify those

who were not exposed directly to the campaign (but who may have talked about it with others) as generally nonexposed to campaign messages; as a result, they likely underestimate the true effect of the campaign.

This trend might stem in part from the tendency of mass media campaign developers to concentrate on individual-level, psychological models of behavior change that tend to treat conversation only as a distal variable (DiClemente, Crosby, Sionean, & Holtgrave, 2004). Under such an approach, the role of interpersonal communication resembles demographic background variables or prior experience variables whose only impact is a function of individual belief change. Although useful for many campaign planning efforts, these approaches do not explicitly focus on the specific roles that it can play.

In the health communication domain, we have witnessed a promising trend toward theory-driven formative research to inform message design and campaign development (J. D. Fisher & W. A. Fisher, 2000; Parrott, Wilson, Buttram, Jones, & Steiner, 1999; Silk & Parrott, 2003). Based on social-psychological theories of behavior change, such research can identify the critical determinants of the recommended behavior in the particular target audience. According to behavior change theories, a campaign message more successfully improves behavior when it changes those critical determinants (Aggleton, 1997; Fishbein & Yzer, 2003; J. D. Fisher & W. A. Fisher, 1992; Flay & Burton, 1990). Although encouraging, the trend toward focusing on behavioral theory for campaign development nonetheless comes at a cost. Theories of health behavior change can usefully be applied to informing message content, but they were not designed to specify the exact communication vehicles that bring about change. As a result, mass media campaigns and evaluation research of these campaigns typically do not consider unofficial communication channels, such as conversation, as relevant to track in order to explain how information spreads as a function of a planned mass media campaign (see Yzer & van den Putte, 2006, for relevant discussion).

In other words, thinking of interpersonal communication as a mediator implies that campaign effects can be indirect, and failure to model conversation in evaluation analyses restricts one's ability to demonstrate those indirect effects adequately. Conversely, accepting a possible mediating role for conversation might better reveal actual campaign effects. It also should move planners beyond thinking solely in terms of maximizing direct exposure to a campaign.

Interpersonal Communication as Moderator of Campaign Effects

Not all mass communication researchers conceptualize interpersonal conversation solely as a simple outcome or as a conduit of information from media to individuals. Following Chaffee (1986), for example, some researchers (e.g., Eveland, 2004, or Tsfati, 2003) have explored whether interpersonal communication might offer a competing channel of information, as we noted above, or even might act in an amplifying (rather than directly mediating) fashion in political or civic contexts. In a political communication example, M. Mendelsohn (1996) found that Canadian voters were primed by election campaign materials to evaluate candidates in terms of overall leadership perceptions, whereas interpersonal conversation tended to activate thinking about salient issues. Voter engagement with mass media not only led to simple information exposure differences, but it also apparently posed consequences for subsequent information processing different from those of interpersonal conversations. In other words, interpersonal channels performed differently than mass media channels and demonstrated the potential to interact with other types of information seeking and exposure to jointly affect issue evaluation.

In some of these studies, in contrast to most diffusion approaches, scholars argue that conversation can facilitate, amplify, or dampen campaign effects. For example, Druckman (2004) questioned whether political campaigns and interpersonal discussions might sometimes prime alternative or orthogonal criteria for candidate judgment. In this way, the absence of competing talk might be viewed as a facilitating condition for media effects while the presence of consonant talk might also boost effects.

In recent years, a number of scholars have built on these studies to explore the possibility that interpersonal communication actually moderates media effects (e.g., Druckman, 2004; Hardy & Scheufele, 2005; Southwell, 2005; van den Putte, Southwell, & Yzer, 2006). Based on this research, talk could facilitate or hamper media effect outcomes in at least two key ways: memory and behavior change. When might such moderation matter? This possibility seems particularly acute with regard to any topic likely to enjoy relatively uneven levels of discussion across general populations. Some people likely talk about politics more than others, for example. Insofar as some groups talk about a topic a lot and others do not, any conception of related mass media

effects as uniform phenomena should be tempered by the potential moderating influence of widely varying conversational networks.

Interpersonal Communication, Media, and Memory

A growing literature on the relationships between conversation and memory (e.g., Dickinson & Givón, 1997; Edwards & Middleton, 1987; Southwell, 2005) suggests that people do not accept and store information directly from media outlets and then simply retrieve that information later in unmitigated fashion. The presence or absence of conversation about a topic around the water cooler or the dinner table or the chat room might augment or affect the degree to which people report remembering any information about the topic initially encoded from mass media exposure.

Why should conversation matter with regard to memory? Theoretically, memory comprises a complex of subsystems vulnerable to a variety of influences (Bower, 2000). We can, and should, view memory as encompassing at least the act of encoding and the dynamics of information retrieval. Retrieval, in turn, offers a prime site for the influence of conversation.

Fuster (1999) offered a useful overview of the retrieval process. While we know that the general concept of memory might better be categorized in terms of different variant tasks such as recognition or recall, some basic ideas about retrieval appear to be valid for memory as a whole. Primarily, retrieval almost never results in a perfectly efficient procurement of a single representation. Instead, a retrieval-prompting stimulus, such as an element of a conversation with another person, invites remembering an array of related thoughts. As Fuster succinctly noted, "[t]hat stimulus, in a broad sense, is like the hand in the basket that picks out one cherry and makes others follow" (p. 199).

This metaphorical perspective parallels network models of memory (see Anderson, 1983, 1990, for discussion), which posit that people share and access information in the brain through activation of interconnected neural nodes. That architecture of nodes, in turn, allows for spillover activation. As Anderson's work highlights, activation of one specific node also will enhance the salience of related information in adjacent nodes.

With these perspectives in mind, we logically can expect that interpersonal communication should arouse related representations of media content that have been previously encoded and formed in the brain. Extending from research on the brain, this notion poses direct implications for our view of campaign audiences. Rather than seeing them as stand-alone addresses for information delivery and encoding, we should view people who engage media content as being interconnected pieces of a larger community that, in turn, might need to be addressed as a whole because of the potential for interpersonal exchange to impact campaign message reception.

For example, general conversation about the specific public health dangers of hurricanes, flooding, or earthquakes could reinforce or amplify memory for connected material gleaned from mass media reports on those topics. Interpersonal communication about the actual media content in question could also reinforce memory for that content. Robinson and Davis (1990), for example, surmised that conversation about news stories may facilitate the long-term storage and retrieval of information from those stories.

Southwell (2005) recently revealed an impact of conversation on memory for advertisements from a health communication campaign by demonstrating a cross-level interaction between the amount of relevant conversation in a respondent's environment and the sheer prevalence of an advertisement in explaining recognition memory for that advertisement. In general, Southwell found a positive relationship between the frequency of an antidrug advertisement on television and the degree that people later remembered viewing that advertisement. The extent to which advertisement prevalence translated into memory, however, depended on the existence of social networks rich in conversation about drugs. People who often engaged in relevant conversation about drugs also tended to be those who later remembered prevalent campaign advertisements.

On a different plane, Druckman (2004) discovered that campaign priming effects in a U.S. Senate election relied upon reinforcement from interpersonal communication. Media campaign emphasis on Social Security and integrity apparently had the strongest priming effect on those who also experienced reinforcement from discussions about the campaign. Such a finding underscores the need for political campaigns to be evaluated with this contextual interaction in mind. We may need to curb our expectations of impact for those

campaigns that do not enjoy the presence of supportive social networks to reinforce effects.

The Southwell (2005) and Druckman (2004) studies also point out the difficulty of teasing out such moderating effects empirically. Both studies are noteworthy for their potential external generalizability, as neither relies solely on laboratory results. Each study reports data from actual campaign experiences, lessening their vulnerability to criticism about the contrived nature of effects often lodged at experimental work. Because of the uncontrolled setting of each, however, more work remains to be done to identify the exact mechanisms at play in producing these interactions. Future work could combine experimental design with realistic contexts to further investigate how talk moderates memory effects.

Interpersonal Communication, Media, and Behavior

What about behavior change? Is it conceivable that interpersonal talk could affect the relationship between media exposure and behavior? Recent work by Scheufele and colleagues begins to address this question, at least with regard to political participation. Scheufele (2001, 2002; see also Hardy & Scheufele, 2005) argued that citizens experience differential gains from media content related to politics and civic engagement as a function of their interpersonal interaction patterns. In other words, he asserted—and found some evidence to suggest—that interpersonal communication moderates the relationship between mass media exposure and political behavior. Such discussion ostensibly provides motive, incentive, and skills to discern the information from media reports necessary to mobilize and to act upon media messages.

These claims, while consistent with evidence gathered to date, also call for further clarification. Perhaps the moderation occurs at the point of information processing and retention rather than somewhere more proximal to intention formation and behavioral performance. In that way, such results might be more consonant with the memory-related interaction noted earlier than with true moderation of direct campaign effects on behavior per se. As Hardy and Scheufele (2005) contended, people might process media-based information more carefully because of anticipated conversation or be better able

to engage and encode information because of knowledge structures developed through past conversation.

Caveats and Future Directions

To this point in our discussion, we have largely dealt with interpersonal communication as a monolithic entity, as though it was a uniform resource that might affect media campaign results in a dose–effect manner. Such an assumption, while convenient for summary discussion, surely is limited; interpersonal communication researchers will readily observe that much more nuance exists to discuss. As Cappella (1985) noted, conversations are exceptionally complex phenomena, consisting of behaviors, stimuli, and perceptions. We also know that interpersonal interactions vary in quality and type, just as social networks vary in size and other characteristics.

Characterizing Conversations

How might interpersonal communications differ in theoretically important ways beyond their simple existence or absence? If conversation acts as a mediator, functioning as a link between campaign exposure in a community and behavior change, then the degree of direct replication of media content in conversation could be an important factor in judging the likely impact of a conversation. If conversation serves as a moderator, affecting the nature of relationships between exposure and belief and behavior outcomes, then general topic consonance between conversation and media messages (regardless of whether people employ specific information from the campaign in discussions) might be sufficient under some circumstances to produce, for example, memory amplification effects. What other conversation variables might matter?

To date, of the various researchers working at the intersection of interpersonal communication, mass media, and campaign outcomes, political communication scholars have been perhaps the most active in attempting to assess relevant quality or content differences in conversation. Some scholars have attempted to code conversations for logical coherence (Herring, 1999) or deliberativeness (Dahlberg,

2001; Graham & Witschge, 2003; Stromer-Galley & LeBret, 2005). Graham and Witschge, for example, used textual analysis to assess whether Internet forums meet the criteria of critical debate, reciprocity, and reflexivity. That tendency to assess conversation's quality is understandable, given the centrality of concepts such as deliberation and opinion heterogeneity for theorists who care about democratic systems.

We also might assess interpersonal communication in terms of agreement or disagreement between participants (Visser & Mirabile, 2004). Disagreement (either on the part of an audience member in response to something he or she encountered via mass media or between two or more viewers subsequent to watching, reading, or listening) might well influence how individuals interpret messages relevant to a media campaign. Price et al. (2002) highlighted the potential role of disagreement for actually improving the deliberative nature of opinion among group members. On a different plane, exposure to conversational disagreement or to a partner who expresses views that conflict with his or her own also might provide the sort of inoculation against later media campaign persuasion attempts discussed by Pfau and colleagues (e.g., Godbold & Pfau, 2000; Pfau et al., 2003), although Visser and Mirabile (2004) also demonstrated that social network agreement can increase resistance to persuasion. Overall, the content of talk between conversational partners may affect the impact that interpersonal communication can have relative to media exposure. We need more work in this vein.

Measuring Conversation

The preceding comments on the character of interpersonal communication directly relate to thinking about measurement issues. A review of mass communication research that addresses interpersonal communication illustrates that researchers often conceptualize it in terms of simple self-report (e.g., de Vreese & Boomgaarden, 2006; O'Keefe et al., 2002; Southwell, 2005; van den Putte, Yzer, & Brunsting, 2005). Such self-reported interpersonal communication typically refers solely to whether or not interaction occurred. For example, van den Putte and colleagues asked participants in their panel study about the extent to which they spoke with others about smoking cessation education campaigns. In that study, participants

wanted to quit more if they engaged in such conversations. Insofar as we are concerned with simple mediating effects in which interpersonal communication extends campaign reach or simple moderating effects in which any relevant conversation amplifies individual retrieval ability for campaign messages, such measures are likely adequate, if imperfect.

We should note limitations of such measures, however. When used in simple cross-sectional settings, they technically risk confounding memory (and all of its complications) and actual past behavior. Even when researchers use questions that include time-frame references or conduct time-order analyses, self-report measures have limits. For example, consistent with our earlier discussion, self-report measures alone typically do not sufficiently assess the character or nature of the conversation. Because the content of the conversation can vary in its consistency with campaign goals, we need to go further to develop conversation content measures in some circumstances.

Self-report measures of interpersonal communication can assess the (remembered) overall valence of past relevant interaction, though often campaign researchers who do measure interpersonal communication focus on talk that is supportive of the campaign or assume that any talk about the campaign would be supportive. The effects that van den Putte and colleagues (2005) found, for example, likely reflect the prevalence of conversations that, for the most part, supported smoking cessation; if the content of such conversations had been mixed or largely counter to campaign goals, they likely would not have demonstrated such a relationship, as the David et al. (2006) study suggests.

A different approach is to focus on measuring the quality of conversations, which can manifest itself as, for example, disruption (Leathers, 1969) and other normative pressure by conversational partners (David et al., 2006), conversational competence (Ellis, Duran & Kelly, 1994), or compliance with majority positions (Price et al., 2006; Visser & Mirabile, 2004). Researchers tapping conversational content and quality often have employed direct observation more than self-report measures. Typically, researchers log conversational entries, describe observed processes, and submit those data to a content analysis (e.g., Price et al., 2006).

Some might argue that such extensive measurement may not be practical for many formal mass media campaign evaluations in which conversations often cannot be readily observed among mass

audiences. As we discussed earlier, however, technological advance-
ments have changed conversation from strictly face-to-face oral
exchanges to possibilities for interpersonal engagement across a
range of modalities, including digital conversation (e.g., Price et al.,
2006). It seems then that new media technologies actually are a boon
in this regard, as they offer at least some possibilities for large-scale
direct observational measurement (see Donath, Karahalios, & Viégas,
1999). For investigation of the full range of effects that we have pro-
posed in this overview, then, we need to continue to explore these
possibilities.

Conclusions

Interpersonal communication likely plays a series of insufficiently
appreciated and important roles in media campaign effects. Based
on theory and evidence, it could be a noteworthy outcome, act as a
mediator of campaign effects, or either reinforce or dampen cam-
paign effects. While we can expect interpersonal communication to
be a regular part of the campaign audience landscape, we probably
cannot expect it always to be an ally for campaign efforts.

We have much to learn about these roles, however. Future work
should investigate the circumstances in which interpersonal com-
munication is most powerful and determine appropriate variables
regarding interpersonal communication and media campaigns,
such as the extent of disagreement or topical consonance with cam-
paign content, that matter in this arena. Moreover, we might be able
to improve our understanding of these dynamics with improved
measurement possibilities that move beyond self-report items. In
addition, confirmation of these dynamics in contexts around the
globe will be worthwhile.

Nonetheless, by explicating an array of roles for interpersonal
communication in the context of campaigns, we hope to have out-
lined some new avenues for campaign evaluation. At a minimum,
we should be able to assess effects more exhaustively with this
framework by emphasizing important interaction possibilities and
potential indirect effects. At the same time, this review also should
serve as a call for greater collaboration between researchers (such
as interpersonal and mass communication scholars) who typically
do not view themselves as inhabiting the same terrain. Moreover,

numerous groups of relevant researchers (in areas such as social psychology, organizational behavior, and public relations) should join this scholarly discussion. Collectively invoking conversation as a variable will not offer any of those researchers a universal panacea in the search for campaign effects, but including the concept in campaign research undoubtedly will enrich our theoretical understanding of when and how campaigns work.

Notes

1. We acknowledge the many diverse traditions in interpersonal communication research. The space and scope of this chapter restricted our ability to offer an overview of the many references relevant to those traditions. For more complete reviews, please see Berger (2005), Knapp and Daly (2002), or Roloff and Anastasiou (2001).

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