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Persuasive Strategies in Health Campaigns

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Persuasive Strategies in Health Campaigns

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The dawn of health campaigns in the United States can be traced back almost three hundred years, when Reverend Cotton Mather successfully promoted public inoculations during Boston's smallpox epidemic of 1721. The temperance movement in the 1800s tenaciously battled alcohol problems by swaying public opinion to support legal restrictions (ultimately resulting in nationwide prohibition), rather than persuading individuals to drink responsibly (Paisley & Atkin, 2012).

In the past half-century, health topics have dominated the public communication campaign agenda, with concerted efforts to prevent smoking, drug use, drunk driving, AIDS, cancer, and obesity. Certain campaigns have attained significant effects on health behavior, while many other campaign efforts have met with only limited success. This chapter will examine factors that determine the degree of persuasive impact of health campaigns.

Health campaigns seek to influence attitudes and behaviors in sizable audiences via strategic development and dissemination of an array of multichannel mediated messages, for purposes of benefitting individuals and/or society. Campaigns utilize systematic frameworks and fundamental strategic principles that have evolved over the past half century. Campaign designers analyze the situation, set objectives, devise strategies, and create a set of messages that are disseminated via mass media, new technologies, and supplemental interpersonal networks.

Theoretical Foundations of Campaigns

In order to better understand and explain the influence of health campaigns, researchers and strategists have focused on the unique nature of campaigns relative to other persuasive contexts. Those who study and design health campaigns have drawn on perhaps an increasing variety of theoretical perspectives to guide their conceptualizations of campaign influence processes.

Distinctive Features of Campaigns

The health campaign constitutes a relatively distinctive form of persuasive communication, due to the nature of health topic and the nature of campaigning. First, the domain of health is composed of a *disparate array of problems*, and the unique medical, political, and social aspects of each type of disease or unhealthy practice tend to shape the communication objectives and strategies. Various health-related behaviors and outcomes lend themselves to a differential focus on promotion, prevention, cessation, detection, and/or treatment; for example, campaigners may address certain problems by positively promoting healthy actions while other problems are better suited to use of threats for preventing risky behaviors.

Second, the nature of health campaigning poses a different challenge than conventional forms of persuasion because campaigners are ethically bound to reach the most unhealthy segments of the population. Unlike commercial and political campaigns that focus on the most promising prospects whom are already favorably predisposed, health campaigns must give priority to influencing resistant audiences who do not practice the healthy behavior and are not interested in doing so. Because people in greatest need of change are most difficult to change, the campaigners must allocate resources to low-yield segments and supplement

direct messages with messages aimed at those who can exert interpersonal influence or institute environmental change.

Third, campaigns tend to be media based, which means that *message exposure* becomes a very important stage of response; Hornik (2002) regards lack of exposure as a key factor limiting campaign effects. The uses and gratifications perspective originally developed by Blumler and Katz (1973) provides useful insights into the motivations that lead to selection of messages and utilization of media content (Rubin, 2009). Prominent placement and pervasive quantity of messages may be needed to ensure that the audience encounters the messages, while message qualities such as personal relevance and entertainment value help to attract attention. For example, stylistic factors are important in reaching the key audience of sensation seekers, who prefer visual messages that are novel, fast-paced, explicit, and intense (Palmgreen, Donohew, & Harrington, 2001). Compelling cues and promos may be necessary to motivate people to seek out messages in channels that are not regularly perused. Defensive avoidance of exposure is a major barrier when message content is inconsistent with predispositions.

Fourth, campaigns tend to feature a *substantial quantity of diverse messages* to be created and coordinated, which affords the campaign team an opportunity to employ a variety of persuasive strategies. With so many message executions, the designer isn't confined to a single approach, but can choose to utilize a mixture of both implicit and explicit conclusions, gain and loss frames, or one-sided and two-sided arguments as tactics in various campaign contexts. Moreover, campaigns tend to disseminate messages over a lengthy period of time, ranging from several weeks to several decades. This timespan enables utilization of prolonged repetition of message executions, combinations of concentrated and dispersed message placement patterns, and sequential compliance techniques.

The persisting and pervasive dissemination of campaign messages featuring certain predominant themes has potential to shape conceptions of reality through cultivation processes (Morgan, 2009). Frequent exposure may cultivate beliefs about the prevalence of various health problems, social norms for practicing promoted as well as proscribed health behaviors addressed in the messages, and expectations of experiencing positive and negative consequences that are regularly portrayed. Similarly, a sustained quantity of prominently placed news items about a health problem or policy solution can raise the salience of these issues through agenda-setting processes (McCombs, 2004). Campaigns are typically able to make only a limited contribution to the media visibility of a health topic, but focused campaign efforts can raise policy issues higher on the media agenda.

Finally, the large quantity of messages enables a campaign to reach multiple intended audiences, as discussed, the audience analysis section of this chapter. Audiences typically are defined and profiled through segmentation analysis that seeks to identify clusters of individuals who are likely to react in a relatively uniform manner to a given campaign message. It should be noted that high-quantity, broad-scale message dissemination often reaches unintended audiences; the problem of unintended effects is discussed near the end of the chapter.

Key Theoretical Perspectives

Health campaign strategies are based on a broad range of theories from the fields of social psychology, public health, communication, and marketing. The applicable conceptualizations can be arrayed in three basic clusters: social marketing and diffusion, health behavior, and

the communication-persuasion matrix.

Campaign strategies derived from *social marketing* typically apply the following approaches: an audience-centered consumer orientation, a sophisticated segmentation of the overall population in to target audiences, a calculated attempt to attractively package pro-health products (while minimizing personal adoption costs), a pragmatic focus on attainable objectives, and a combination of direct persuasion, policy change, and interpersonal communication to influence behavior (Andreasen, 1995, 2006; Kotler & Lee, 2008; McKenzie-Mohr, 2011). *Social norms marketing* narrowly applies a pro-health form of promotion with messages demonstrating the underestimated popularity of desirable practices, such as responsible drinking (Perkins, 2002). The social marketing approach blends well with the diffusion of innovations theory, which highlights the ideas of relative advantage and trialability of recommended behaviors, moving adopters through stages, opinion leadership for advancing the adoption process via multistep flows through interpersonal channels and social networks (Rogers, 2003).

The segmenting and staging components of social marketing and diffusion approaches are reflected in the popular transtheoretical model (Prochaska & Velicer, 1997), which features different stages (precontemplation, contemplation, preparation, action, or maintenance) that shape subaudience readiness to attempt, adopt, or sustain health behaviors. Campaigns typically need to have multiple strategies to influence subaudiences who have progressed to each stage.

McGuire's (2001) classic communication-persuasion matrix specifies an individual-level array of communication concepts that can be utilized by health campaign strategists. This basic input-output model arranges the conventional *input variables* (source, message, channel, and receiver) on one axis crossed by a lengthy series of *output variables* ranging from exposure and processing, to learning and yielding, and finally to enactment of recommended behaviors on the other axis. Among inputs, McGuire emphasizes that campaign impact is importantly determined by source credibility, persuasive appeals to a broad array of motives, message repetition, and multiple paths to persuasion. His matrix serves as a comprehensive organizing structure for a broad range of persuasion theories explaining both input and output processes pertinent to campaigns.

A cluster of *health behavior* perspectives, which have typically been adapted from social psychology theories and models, have been applied to health campaign strategies. The theory of planned behavior (Ajzen, 1991) is an extension of the theory of reasoned action (Azjen & Fishbein, 1980). The TRA, which has been frequently applied to the health context, formulates a combination of personal attitudes, perceived norms of influential others, and motivation to comply as predictors of intended behavior. A key underlying mechanism is based on the expectancy-value equation, which postulates attitudes are predicted by likelihood beliefs about certain consequences of a behavior, multiplied by one's evaluation of those consequences. The TRA shares similarities with the health belief model (Janz & Becker, 1984); the HBM components of perceived susceptibility multiplied by severity of consequences are particularly pertinent to designing health threat appeals (Stephenson & Witte, 2001).

The TPB is centrally applicable to health because it bridges the significant gap between intentions and behavior by adding the concept of perceived behavioral control, which originates from Bandura's (1997) self-efficacy theory. Self-efficacy is a key component of Social Cognitive Theory (Bandura, 1986), which illuminates media influence processes via

source role models, explicitly demonstrated behaviors, and depiction of vicarious reinforcement.

In the communication discipline, Fishbein and Cappella (2006) and Cappella and associates (2001) have developed an integrative theory of behavior change that integrates HBM, SCT, and TRA to specify how external variables, individual differences, and underlying beliefs contribute to differential influence pathways for outcome behaviors, *intentions*, attitudes, norms, and self-efficacy.

Audience Analysis and Campaign Design

Identifying Audience Segments

Health campaign design begins with a conceptual assessment of the situation to determine opportunities and barriers and to identify which behaviors would to be performed by which people (Atkin & Salmon, 2010; Silk, Atkin, & Salmon, 2011). Rather than attempting to reach the broad public, campaign designers typically identify specific segments of the overall population. There are two major strategic advantages of subdividing the public in terms of demographic characteristics, predispositions, personality traits, and social contexts. First, campaign efficiency is improved if subsets of the audience can be prioritized according to their (a) degree of centrality to attaining the campaign's objectives, and (b) degree of receptivity to being influenced to adopt the recommendations. Second, effectiveness is increased if message content, form and style, and channels are adapted to the attributes and abilities of subgroups.

The design specifies *focal segments* of the population whose health practices are at issue, and the primary *focal health behaviors* that the campaign ultimately seeks to influence. The next step is to trace backward from the focal behaviors to identify the proximate and distal determinants, and then create *models* of the pathways of influence via attitudes, beliefs, knowledge, social influences, and environmental forces. The next phase is to examine the model from a *communication* perspective, specifying *intended audiences* that can be directly reached) and *target behaviors* (ranging from preliminary acts to focal practices) that can be influenced by campaign messages. This requires a comprehensive plan for combining the myriad strategic components subject to manipulation by the campaigner, drawing on the three clusters of theories.

Formative Evaluation

The application of general campaign design principles depends on an understanding of the specific health context (especially types of audiences and types of products), so effective design usually requires extensive formative evaluation inputs (Atkin & Freimuth, 2012). In the early stages of campaign development, designers collect background information about the focal segments and interpersonal influencers, using statistical databases and custom surveys to measure audience predispositions and their evaluations of prospective sources and appeals.

Formative evaluation provides strategists with information about the nature of the existing problematic behaviors to be addressed by the campaign and the “product line” of responses to be promoted. Audience predispositions toward prospective recommended actions can be assessed in order to select the most promising options. In order to achieve bottom-line

behavioral objectives, campaign messages must first have an impact on preliminary or intermediate variables along the response chain. Formative research illuminates the following variables for key segments of intended audiences: (1) entry-level awareness, knowledge, and literacy related to the health topic; (2) beliefs and perceptions pertaining to barriers and opportunities affecting performance of a behavior, to likelihood expectations of experiencing beneficial and harmful outcomes, and to social support; (3) existing attitudes and values, notably evaluations of outcomes and opinions about policy options; (4) salience factors, such as level of involvement in the health topic, agenda ranking of a policy issue, and relative weighting of various outcomes; (5) self-efficacy and confidence in implementation skills; and (6) media channel usage and topical interpersonal communication. Researchers also obtain rating scores for prospective source messengers and message appeals.

As message concepts are being refined and rough versions are created, qualitative reactions are obtained in focus group discussion sessions, and supplemental quantitative ratings of perceived effectiveness are measured in message testing laboratories. A meta-analysis performed by Dillard, Weber, and Vail (2007) found that pretest ratings correlated +.41 with actual message effects, indicating that perceived effectiveness is a moderately strong predictor.

Direct Effects on Focal Audience Segments

Receptivity to a health campaign may be considered as a continuum. Campaigns tend to achieve the strongest impact when disseminating trigger or reinforcement messages designed to promote healthy practices among those who are already favorably predisposed (e.g., adoption of five-a-day fruit and vegetable consumption by already health conscious-persons). A somewhat less receptive (but more important) target is composed of “at risk” people who might try an unhealthy behavior in the near future (e.g., drug use among teens whose peers are experimenting with drugs). On the other hand, those committed to unhealthy practices tend not to be readily influenced by directly targeted campaigns, so a heavy investment of resources to induce immediate discontinuation is likely to yield a marginal payoff.

Campaigners also need to consider demographic, social, and psychological-based subgroups (e.g., high vs. low in income, social support, or sensation seeking). Influencing these varied population segments may require a complex combination of narrowly customized messages, along with widely applicable multitargeted messages presenting broad appeals and optimally ambiguous recommended actions.

The nature of the health problem dictates the broad parameters of the focal audience to be influenced (e.g., adolescents in an antidrug campaign, middle-aged women in a breast cancer campaign). Because audience receptivity tends to be a more central determinant of campaign effectiveness than the potency of the campaign stimuli, there will be differential success depending on which segment is targeted. To achieve the maximum degree of communication effects, campaign designers often focus on receptive target audiences ready to be influenced to perform the practice.

Indirect Pathways of Influence

It is often valuable for health campaigns to supplement the predominant direct approach (educating and persuading the focal segment) by influencing additional target audiences who can indirectly exert interpersonal influence or help reform environmental conditions that shape the behaviors of the focal segment (Atkin & Salmon, 2010). Thus, campaigners can profitably

invest effort and resources in campaign initiatives aimed at (1) direct impact on *interpersonal influencers* and (2) *policy-makers* (direct impact on those who make policy combined with indirect impact via interested publics who attempt to influence them). Mass media campaigns have considerable potential for producing effects on institutions and groups at the national and community level as well as motivating personal influencers in close contact with individuals in the focal segment. These influencers can provide positive and negative reinforcement, shape opportunities, facilitate behavior with reminders at opportune moments, serve as role models, and exercise control (by making rules, monitoring behavior, and enforcing consequences). Furthermore, influencers can customize their messages to the unique needs and values of the individual.

Interpersonal Influencers

An important goal of campaigns is to stimulate interpersonal influence attempts by inspiring, prompting, and empowering influencers. Influencers are similar to opinion leaders, but are in a position to exercise means control as well as utilizing persuasion. For example, a variety of peer and authority figures are in a position to personally educate, persuade, or control the prime focal segment of high-risk adolescents: parents, siblings, friends, coworkers, bosses, teachers, club leaders, coaches, medical personnel, and police officers. More generally, interpersonal networks can play a key role in preventing unhealthy practices, assisting with cessation efforts, and encouraging screening visits. Some influencers are responsive to negative appeals that arouse concern about harmful consequences to those they are trying to help behave appropriately. Consequently, a portion of campaign messages can be designed to motivate various interveners, facilitators and enforcers to take positive action … or at least to dissuade them from emboldening unhealthy choices. The effectiveness of social network-oriented media campaigns, typically targeted to friends and family members of the focal individuals to be influenced, is reviewed in the health domain by Abroms and Maibach (2008).

Societal Policy Makers

Individuals' decisions about health practices are clearly shaped by the constraints and opportunities in their daily environment, such as monetary expenses, rules, laws, social pressures, community services, entertainment role models, and commercial messages. Through the interventions of government, business, educational, medical, media, religious, and community organizations, many of these potent forces can be engineered to increase the likelihood of healthy choices or discourage unhealthy practices. Key initiatives include direct service delivery, restrictions on advertising and marketing practices, and the imposition of taxes. Consider the example of smoking: substantial reductions in tobacco use have been attained by instituting policies that increase monetary cost, decrease locations where smoking is permitted, broaden availability of cessation assistance programs, reduce smoking depictions in movies, and tightly restrict ads that promote cigarettes. More fundamental long-range approaches might attempt to reduce health disparities by reducing poverty, improving schools, broadening access to the health care system, or enhancing employment opportunities.

Thus, an important campaign approach is to aim messages at constituencies that can influence government and corporate policy makers, who are in a position to formulate policies that shape the environment for health behaviors. Strategically, this approach relies primarily on a two-step pathway from the campaign to the constituency to the policy makers. First, the campaign seeks to influence public opinion within population segments that are inclined to be involved in addressing the health issue. To facilitate the second step, the campaign provides

guidance on techniques to use in contacting and persuading those who determine policy, such as letter writing, petition signing, testifying, boycotting, protesting, or voting. Campaign organizers may also cite public opinion poll findings (or commission custom polls) to demonstrate support for the advocated position. As a supplement, the campaigners may create elaborate persuasive messages (e.g., position paper, testimony, mailing, op-ed piece) that are designed to be submitted directly to the policy makers.

Reformers have developed tactics that combine community organizing and mass media publicity to advance healthy public policies through the *media advocacy* techniques. News coverage of health can shape both the public agenda and the policy agenda pertaining to new initiatives, rules, and laws related to health in society. An important strategy involves changing the public's beliefs about the effectiveness of policies and interventions that are advanced, which leads to supportive public opinion (and direct pressure) that can help convince institutional leaders to formulate and implement societal constraints and opportunities.

The four primary activities involved in media advocacy include (1) developing an overall strategy that involves formulation of policy options, identification of stakeholders that have power to create relevant change and apply pressure, and development of messages for these stakeholders; (2) setting the agenda by gaining access to the news media through feature stories, staged news events, and editorial commentary; (3) shaping the debate by framing public health problems as policy issues, by emphasizing social accountability, and by providing evidence for the broader claims; and (4) advancing the policy by maintaining interest, pressure, and coverage over time (Wallack & Dorfman, 2001).

Over the past 25 years, activists seeking to influence public and private sector policy makers to enact reforms that address health problems have concentrated their efforts on smoking, drinking, and breast cancer. Substantial success has been attained in influencing federal and local governments to impose alcohol and tobacco control measures, and to obtain funding for breast cancer prevention research. Policy-oriented campaigns aimed at businesses have also been effective, as shown in a recent analysis health-related advocacy campaigns aimed at changing corporate practices in the alcohol, tobacco, food, pharmaceutical, automobile, and firearms domains; the study concludes that campaigns achieved policy or mobilization outcomes contributing to health and safety improvements in these types of companies (Freudenberg, Bradley, & Serrano, 2009).

Prevention versus Promotion

Campaigns are generally designed with measurable objectives specifying behavioral responses by audience members. In the health arena, the focal behavior is usually a specific practice or discrete action. However, there are numerous intermediate responses that might be targeted, such as awareness, knowledge, salience priorities, beliefs, expectancies, values, and attitudes; campaigns may seek to change key variables along the pathways leading to the focal behavior. The two fundamental approaches are promotion of healthy behavior or prevention or cessation of unhealthy behavior. Traditionally, prevention campaigns more often present fear appeals highlighting negative consequences of an unhealthy behavior, rather than promoting the desirability of a positive alternative. The negatively oriented prevention approach is more potent for topics where harmful outcomes are genuinely ominous.

The social marketing perspective is more applicable to promoting positive behavior rather than directly combating unhealthy behavior; this approach promises rewarding gains from attractive

"products." Product promotion is better suited for attractive concepts, such as the "designated driver" or "staircase exercising," rather than for less compelling concepts, such as "alcohol abstinence" or "drug-free lifestyle." In developing behavioral recommendations in promotional campaigns, designers can draw on an array of options from the "product line." These target responses vary in palatability based on degree of effort, sacrifice, and monetary expense; in determining the degree of difficulty of the product to be promoted, a central strategic consideration is receptiveness of the focal segment. The prolonged nature of campaigns enables the use of gradually escalating sequential request strategies over a period of months or even years. Campaigns have potential to overcome defensive responses to difficult products by initially featuring simpler or softer products that fall within the audience's latitude of acceptability.

Persuasive Strategies

Although designers typically include some *awareness* messages and a few *instructional* messages in the campaign mix, *persuasive* messages constitute the central type of content in health campaigns. Campaigns feature persuasive appeals derived from McGuire's matrix or health behavior models, such as the theory of planned behavior. These theories provide numerous lines of argumentation to convince the audience to adopt the advocated action or avoid the proscribed behavior. For target audiences that are already favorably inclined toward the recommended behavior, the campaign has the relatively simple persuasive task of reinforcing existing predispositions (e.g., strengthening a positive attitude, promoting postbehavior consolidation, and motivating behavioral maintenance over time). However, for the least healthy segments of society who are most in need of attitude and behavior change, the campaign strategists face a distinct challenge in achieving impact. Because a lengthy campaign generally disseminates a broad array of persuasive messages, strategists have ample opportunity to develop and refine a variety of appeals built around motivational incentives designed to influence attitudes and behaviors.

Incentive Appeals

In creating and presenting persuasive appeals on health topics, the initial strategic decision involves message framing (O'Keefe & Jensen, 2007; Quick & Bates, 2010). For most direct attempts to influence health behaviors, strategists face a basic choice between motivating the audience with prospects of experiencing consequences that are generally regarded as desirable or undesirable. In gain-framed approaches, the messages present incentives that promise the audience that performing a healthy practice (or not performing an unhealthy practice) will either attain a valued outcome or avoid an undesirable outcome; by contrast, loss-framed message appeals argue that performing an unhealthy practice (or not performing a healthy practice) will lead to either attainment of an undesirable outcome or nonattainment of a desirable outcome. The most prevalent strategies in health campaigns are threats of losses from performing a proscribed practice and promises of gains from performing a recommended practice.

In health campaigns, the most widely used design frameworks employ a basic expectancy-value mechanism, wherein attitudinal and behavioral responses are contingent on each individual's valuation of outcomes promoted in campaign messages. Messages typically focus on the two expectancy-value components of outcomes: the subjective probability of a consequence occurring and the degree of positive or negative valence of that outcome. For the conventional loss-framed messages threatening undesirable consequences, the

operational formula derived from the health belief model is the summation of *susceptibility* × *severity* across various outcomes. The prime communication objectives are (1) to change expectancy beliefs to a higher level of probability, (2) to intensify the negativity or positivity of the valence, and (3) heighten the salience of detrimental or beneficial outcomes associated with engaging in recommended practices.

The basic dimensions of incentives include physical health, economic, legal, social, psychological/aspirational, and effort; each has potential positive and negative valuations based on audience predispositions. The most frequently used dimension in health campaigns is physical health, with negatively valued threats (particularly death, illness, and injury) featured more often than positive promises, such as wellness.

Campaigns have increasingly diversified negative incentive strategies to include appeals to include the other undesirable dimensions (e.g., psychological regret, social rejection, monetary cost). Moreover, diversification has increasingly broadened the emphasis on positive incentives (e.g., valued states such as self-esteem, altruism, and efficiency).

Negative Appeals

Health campaigns rely heavily on loss-framed messages focusing on undesirable consequences associated with initiating or continuing an unhealthy practice (Stephenson & Witte, 2001). Instead of primarily emphasizing intense fear appeals, health messages might also pose threats of a less severe nature and present negative incentives beyond the physical health domain. For health topics where there are no compelling consequences (e.g., low probability of a genuinely strong valence), the next best approach is to select a mildly valenced incentive that is highly probable. In the case of drug campaigns, minor negative physical incentives might be loss of stamina, weight gain, and physiological addiction. Other messages might feature negative social incentives (e.g., looking uncool, alienating friends, incurring peer disapproval, losing the trust of parents, or deviating from social norms), negative psychological incentives (e.g., reduced ability to concentrate, low grades, feeling lazy and unmotivated, losing control, and making bad decisions, as well as anxiety about getting caught or experiencing harm, guilt, and loss of self-respect), economic incentives (e.g., diminished job prospects, fines, the cumulative cost of purchasing drugs, and inability to spend money on other needs and desires) and legal incentives (penalties for violating laws and policies, such as incarceration, loss of driver's license, or suspension from school).

Positive Appeals

Campaigns can also diversify beyond the traditional reliance on fear appeals by presenting a higher proportion of gain-frame incentives. For many of the negative consequences of performing the proscribed practice, there is a mirror-image positive outcome that can be promised for performing the healthy alternative. In the physical health dimension, drug abstinence messages might offer prospects ranging from a longer lifespan to enhanced athletic performance. Similarly, psychological incentives might promise outcomes like gaining control over one's life, achieving a positive self-image, attaining one's goals, or feeling secure. Social incentives might include being cool, gaining approval and respect, forming deeper friendships, building trust with parents, and being a good role model. The social norms marketing approach (DeJong & Smith, 2012; Perkins, 2002) is a widely used strategy in promoting responsible drinking on college campuses; messages typically feature statistical evidence to demonstrate that a majority students perform or approve of healthy practices (e.g., use of the designated driver arrangement, or approval of a four-drink limit on celebratory

occasions).

Multiple Appeals

There might be dozens of persuasive appeals that are potentially effective on a given health topic, so it is advantageous for campaigners to use a large variety of appeals rather than relying on a handful of incentives. A major campaign's capacity for conveying multiple appeals allows dissemination of diverse messages; this provides several distinct reasons for the individual to comply or to influence multiple segments of the target audience via media channels where precise targeting is difficult. In identifying incentives to be presented, the key criteria are the salience of the promised or threatened consequences, the malleability of beliefs about the likelihood of experiencing these outcomes, and the potential persuasiveness of the arguments that can be advanced (Cappella et al., 2001). For messages about familiar health subjects, it is important to include novel appeals to complement the standard arguments. Preproduction research can test basic concepts to determine the effectiveness of each one and to examine optimum combinations, and pretesting research can compare the relative influence of executions of various appeals.

Evidence

People tend to be defensive when processing threatening messages about the subject of their personal health, which may be manifested by reactance, counterarguing, or denial of applicability (Stephenson & Witte, 2001). Thus, there is a priority for providing credible evidence to buttress claims about susceptibility, especially concerning risk level of harmful physical consequences. Formative evaluation is helpful in determining which types of individuals are influenced by health messages that use hard information (e.g., citing statistics, offering documentation, and quoting experts), and which segments are more responsive to visual imagery (e.g., exemplars, dramatized specimen cases, and testimonials). Health message designers take care to demonstrate how the evidence is relevant to the situation experienced by the target audience, and are cautious about using extreme claims (e.g., singular cases, implausible statistics, or excessive gore) or contested information. Not only might these elements strain credulity and arouse suspicion, but such content may be challenged by critics on contentious health issues.

One-Sided versus Two-Sided Campaign Messages

Compliance with behavioral recommendations is impeded by a variety of disadvantages perceived by the audience, notably effort in adopting healthy practices and forsaking the pleasures of unhealthy practices. The strategist is faced with the questions of whether and how to handle these drawbacks. Across major phases of a campaign, the one-sided strategy would consistently ignore the disadvantages and present only the case favoring the healthy behavior or opposing the unhealthy competition; campaigns typically disseminate mostly one-sided messages. The high quantity of campaign messages enables apportionment of some messages to the two-sided strategy.

In a two-sided message, the elements of the opposing case are strategically raised and discounted in order to counteract current misgivings and future challenges, using techniques such as refuting inaccurate information or diminishing the salience of a drawback. The conditions of the typical health campaign context favor a judicious inclusion of two-sided appeals for several reasons: (1) key disadvantages of certain healthy practices are already

widely recognized, (2) priority target audience segments are experiencing the benefits of unhealthy practices, (3) media and interpersonal channels frequently convey messages promoting the advantages of unhealthy practices. Formative evaluation is helpful in precisely determining the extent to which the "other side" is familiar to various audiences.

Message Qualities

Designing mediated health campaign messages involves the strategic selection of substantive material and the creative production of stylistic features. In developing the combination of message components, the campaign designer may seek to emphasize up to five influential message qualities. First, c*redibility* is primarily conveyed by the trustworthiness and competence of the source and the provision of convincing evidence. Second, the style and ideas should be presented in an *engaging* manner via selection of interesting or arousing substantive content combined with attractive and entertaining stylistic execution; this is a key factor because many people regard health topics as inherently dull. The third dimension emphasizes selection of material and stylistic devices that are personally *involving* and *relevant* (e.g., portrayals of familiar settings, engrossing narratives, or personally tailored information), so receivers regard the behavioral recommendation as applicable to their own health situation and needs. The fourth element is *understandability*, with simple, explicit, and detailed presentation of health content that is comprehensive and comprehensible to receivers. For persuasive messages, the fifth factor is *motivational incentives*, as previously described.

Message Sources

Most health messages prominently depict source messengers, and most identify the campaign's sponsor as well. The *messenger* is the model or character in the message that delivers information, demonstrates behavior, or provides a testimonial. Salmon and Atkin (2003) provide a lengthy discussion of the strengths and weaknesses of various types of messengers in health campaigns. Messengers can substantially enhance the quality of message content by performing in an engaging manner, imparting trust- or competence-based credibility, and possessing characteristics that are relevant to key audience segments. In the health campaign context, three key contributions of source messengers are (1) increasing breadth of exposure by attracting attention in the cluttered media environment (2) facilitating comprehension through personalization or modeling of unfamiliar or complex health behavior recommendations, and (3) augmenting visibility and memorability of the campaign over sustained periods of time. Zillmann's (2006) exemplification theory presents a detailed examination of the mechanisms that healthy and unhealthy exemplars appearing in mediated messages use to convey risk perceptions, elicit reactivity, and motivate protective action.

Eight types of messengers are typically featured in campaign messages: celebrities, health experts (e.g., doctors/researchers), professional performers (e.g., models/actors), ordinary people (e.g., blue-collar males), public officials (e.g., political leaders), organizational executives (e.g., hospital administrator), specially experienced individuals (e.g., victims/survivors), or distinctive characters (e.g., animated/costumed figures). Selection of each messenger depends on the predispositions of the target audience, persuasion mechanism underlying the strategy, and type of message. Awareness messages tend to present celebrities, characters, and public officials to draw attention and make a superficial impression; instruction messages are more likely to depict performers and health organization

executives to describe or demonstrate how to carry out complex behaviors; and persuasion messages may more often feature ordinary people for purposes of relevance and identification, experts for delivering evidence, and experienced individuals for reinforced or cautionary role modeling.

Each source has its advantages and drawbacks. For example, a researcher or medical authority would strengthen the expertise dimension, but would probably be less engaging due to the delivery of technical information. In contrast, a message that features a popular celebrity can draw great interest to a campaign message, especially if the celebrity conveys experiential competence or relevance as a victim or survivor of the health problem. Indeed, certain celebrities are highly respected and perceived to be trustworthy on various health topics, while other celebrities may engender skepticism, distract from message content, have an unhealthy image, or lose their luster before the campaign concludes. Ordinary people serving as source presenters may be perceived by the audience to be similar and thus relevant and perhaps trustworthy as a role model, but may lack perceived competence or attractiveness. Despite certain drawbacks, the personalized, credible, and engaging qualities of a source figure offer clear advantages over presenting message material without a manifest messenger or only with attribution to an impersonal organization.

The large number of message executions over a lengthy campaign enables the strategist can deploy a substantial collection of source messengers. Multiple messengers have potential for increasing the odds of success, by leveraging the complementary strengths of each type to serve certain functions for diverse audience segments. However, this tactic may increase the risk information overload and undermine continuity across message executions. It should be noted that continuity can still be attained by highlighting the sponsoring organization via prominent name identification, logo, and other symbols. Aside from this provision of branding linkages across disparate campaign stimuli, some widely recognized sponsors can also draw attention to the messages and enhance the credibility or relevance the content.

Mediated Communication Channels

To disseminate messages, health campaigns employ an ever-richer variety of channels encompassing the three basic categories of traditional mass media, conventional minimedia, and interactive technologies. Among mass media, campaigners have customarily relied on television, radio, newspapers, and magazines, specifically broadcast spots, news items, feature stories, and entertainment program inserts. The minimedia play a supplemental role via secondary message vehicles, including billboards, pamphlets, posters, slide shows, direct mailings, and automated phone calls. The importance of new technology channels for health campaigning has rapidly increased, with widespread utilization of websites, email listserves, serious games, and social media (notably Facebook), as well as emerging use of mobile phones, tablets, Twitter, and blogs.

In assessing the dozens of options for channeling campaign messages, designers take into consideration advantages and drawbacks along a number of communicative dimensions. Salmon and Atkin (2003) discuss channel differences in terms of *reach* (proportion of population exposed to the message), *specializability* (narrowcasting to specific subgroups or tailoring to individuals), *interactivity* (receiver participation and stimulus adaptation during processing), *personalization* (human relational nature of source-receiver interaction), *decodability* (mental effort required for processing stimulus), *depth* (channel capacity for conveying detailed and complex content), *credibility* (believability of material conveyed), *agenda-setting* (potency of channel for raising salience priority of issues), *accessibility* (ease

of placing messages in channel), and *economy* (low cost for producing and disseminating stimuli).

Channel selection is most often governed by the usage patterns of target audiences and the nature of the message and topic, within the constraints of available resources. Health campaigners find it more practical to stage a pseudo-event that generates irregular news coverage than to raise funds to purchase time or space in the ideal media vehicle, and they will place a PSA on a low-rated mature adult radio station than on a hot teen station due to ready accessibility. Certain topics pertaining to health and safety attain free publicity because they are inherently attractive to reporters and editors working in traditional media, such as newspapers, women's magazines, radio talk shows, and TV newsrooms.

Indeed, accessibility and economy are major reasons why typically underfunded health campaigners embrace new technologies. Although message production expenses can be substantial for elaborate website features and for sophisticated games, little cost is incurred for many forms of dissemination via digital media. There are several additional compelling reasons for the rise of digital media channels, notably depth capacity, interactivity, and tailoring (Edgar, Noar, & Freimuth, 2007; Parker & Thorson, 2009; Rice & Atkin, 2009). Unlike traditional media vehicles that are limited to a certain number of pages per issue or minutes per day, digital media have remarkable *depth capacity* for storing information that can be retrieved by website users or experienced by game players. Websites are an especially important channel for people that are highly involved in health topics, such as health opinion leaders seeking to stay well-informed or individuals diagnosed with an illness pursuing treatment information.

Interactivity enables the user and source to use monologue, responsive dialog, mutual discourse and feedback, involving a wide array of specific design features, such as surveys, games, services, email, hyperlinks, and chat rooms (Rice & Atkin, 2009). For example, online health-related support groups provide social support and help boost self-efficacy.

Thousands of health games on computers, consoles, websites, and mobile apps have been developed to teach skills, boost self-efficacy, and simulate role-playing. Lieberman's (2012) overview of studies and meta-analyses indicates that health games have positive effects on behavior change related to physical activity, nutrition, mental health, safer sex negotiation, disease self-management, and adherence to one's treatment plan. Health games are especially attractive to the younger population segments that are harder to reach and influence through traditional channels. The interactive, observational, experiential, and absorbing nature of game playing has enormous potential for advanced applications to health, such as utilizing sophisticated avatars and 3-D body model characters.

Digital media facilitate *tailoring* of individually customized messages that reflect each person's predispositions and abilities (Noar, Harrington, & Aldrich, 2009; Rimer & Kreuter, 2006). Online screening questionnaires assess factors such as readiness stage, stylistic tastes, knowledge levels, and current beliefs, and then direct them to *narrow-cast* messages. Not only does this approach increase the likelihood of learning and persuasion, but it decreases the possibility of boomerang effects. Mobile phone calling and texting are well-suited to offer tailored, wide-reaching, interactive, and continuing campaign interventions (Cole-Lewis & Kershaw, 2010).

There are a number of other ways to utilize new media for health campaigns. Online public service messages include brief banner ads, solicitations to click through to a website,

streamed PSA spots, or long-form video messages on YouTube. Paid health promotion ads on social media sites have greater potential for impact because of more prominent placement and more precise targeting. Blogs link together users with similar information needs and concerns to share their views and experiences, while wikis support collaboration among campaign members. Podcasts can provide relevant audio information to motivated audiences, and Twitter provides updates and protocol reminders to campaign-specific followers.

Messages placed in the mainstream media can attract the attention of many informal influencers, who can then exert an indirect influence on the focal individuals. Health issues gaining visibility in the news media can benefit from the agenda-setting effect (e.g., the obesity epidemic), whereby problems and solutions are perceived as more urgent and significant. This is particularly important in media advocacy strategies targeted at opinion leaders and policy makers.

Entertainment-education, the practice of embedding health-related material in popular entertainment programming or creating entertainment content as a vehicle for health education, attracts large audiences and conveys information in a relevant and credible manner. This approach has proved quite successful in promoting health in less developed countries (Singhal, Cody, Rogers, & Sabido, 2004), and it also has been used in the United States to promote safety belts, use of designated drivers, safe sex, and drug abstinence as well as dealing with youth-oriented topics such as alcohol and obesity prevention.

There are tens of thousands of websites offering a wide variety of health materials; in addition to prepackaged pages and video clips, the interactive capacity enables campaign message tailoring. Tailored messages are constructed via diagnostic questionnaires that gather each individual's background information (e.g., capabilities, stage of readiness, stylistic taste, knowledge level, and current beliefs) and translate the data into individually customized messages (Noar et al., 2009; Rimer & Kreuter, 2006). Not only does this approach increase the likelihood of learning and persuasion, but it decreases the possibility of boomerang effects.

Quantitative Dissemination Factors

Five major aspects of strategic message dissemination are the total volume of messages, the amount of repetition, the prominence of placement, the scheduling of message presentation, and temporal length of the campaign. A substantial *volume* of stimuli helps attain adequate reach and frequency of exposure, as well as comprehension, recognition, and image formation. Message saturation also conveys the significance of the problem addressed in the campaign, which heightens agenda setting and salience. A certain level of *repetition* of specific executions facilitates message comprehension and positive affect toward the product, but high repetition eventually produces wear-out and diminishing returns.

Placement *prominence* of messages in conspicuous positions within media vehicles (e.g., newspaper front page, heavily traveled billboard locations, or high-rank search engine websites) serves to enhance both exposure levels and perceived significance. Another quantitative consideration involves the *scheduling* of a fixed number of presentations; depending on the situation, campaign messages may be most effectively concentrated over a short duration, dispersed thinly over a lengthy period, or distributed in intermittent bursts of “flighting” or “pulsing.” In terms of the calendar, there are critical “timing points” when the audience is more likely to be attentive or active in information-seeking.

Regarding the overall *length* of the campaign, the challenging task of gaining audience attention and compliance often requires exceptional persistence of effort over long periods of time to attain a critical mass of exposures to produce impact. In many cases, perpetual campaigning is necessary because focal segments of the population are in constant need of influence as newcomers enter the priority audience, backsliders revert to prior misbehavior, evolvers gradually adopt practices at a slow pace, and vacillators need regular reinforcement.

To maximize quantity, campaigners seek to gain media access via monetary support from government and industry (to fund paid placements and leveraged media slots), aggressive lobbying for free public service time or space, skillful use of public relations techniques for generating entertainment and journalistic coverage, and reliance on low-cost channels of communication, such as websites and social media. The Ad Council creates more PSA messages that address health issues than for any other topic. Finally, the reach of a campaign is often boosted by sensitizing audiences to appropriate content already available in the media and by stimulating information-seeking from specialty sources.

Campaign Effectiveness

Researchers have assessed the impact of media-based health campaigns using survey and field experimental designs over the past several decades. The findings from many empirical studies have been summarized in literature reviews and metaanalyses, the most recent of which include Lundgren and McMakin (2009), Rice and Atkin (2009), Atkin and Salmon (2010), Green and Tones (2010), Webb, Joseph, Yardley, and Michie (2010), Rice and Atkin (2011), Silk et al. (2011), Phillips, Ulleberg, and Vaa (2011), Snyder and LaCroix (2012), and Paisley and Atkin (2012). The preponderance of evidence shows that conventional campaigns typically have limited direct effects on most health behaviors; specifically, campaigns are capable of exerting moderate to powerful influence on cognitive outcomes, but less influence on attitudinal behavioral outcomes. Further, the degree of impact on behavior tends to occur in proportion to such factors as dose of information, duration of campaign activities, integration of mass and interpersonal communication systems, and supplementation of social-change strategies, such as enforcement and engineering. Societal level outcomes in the form of policy changes have also been attained, but isolating the campaign input is difficult.

A campaign may not attain a strong impact for many reasons. Audience resistance barriers arise at each stage of response, from exposure to behavioral implementation. A major problem is simply reaching the audience and attaining attention to the messages (Hornik, 2002). Exposed audience members are lost at each subsequent response stage, due to defensive responses, such as misperception of susceptibility to threatened consequences, denial of applicability of message incentives to self, defensive counterarguing against persuasive appeals, rejection of unappealing behavioral recommendations, and sheer inertial lethargy. Public communication campaign outcomes tends to diminish when receivers regard messages as offensive, boring, preachy, confusing, irritating, misleading, irrelevant, uninformative, unbelievable, or unmotivating.

Salmon and Murray-Johnson (2001) make distinctions among various types of campaign effectiveness, including *definitional effectiveness* (e.g., getting a social phenomenon defined as a social problem or elevating it on the public agenda), *contextual effectiveness* (e.g., impact within particular contexts, such as education vs. enforcement vs. engineering), *cost-effectiveness* comparison (e.g., prevention vs. treatment, addressing certain problems over others), and *programmatic effectiveness* (e.g., testing campaign outcomes relative to stated goals and objectives).

Rather than being defined in absolute terms, campaign effectiveness is often defined relative to pre-campaign expectations. Although campaign planners may be tempted to set readily attained goals, lowering the bar does not necessarily improve campaign performance. Nevertheless, Fishbein (1996) advances the pragmatic argument that realistically small effect sizes should be set for media campaign so that obtaining effects is achievable.

Future Research Agenda

Fortunately for the next wave of campaign scholars, numerous theoretical and practical challenges remain to be addressed if health campaigns are to be more successful. Investigations are needed answer the following questions pertaining to campaign design and implementation.

What is the optimum *mix of message content themes*? Health campaigns typically use multiple persuasive strategies, but what is the most effective ratio of gain-frame versus loss-frame messages, one-sided versus two-sided appeals, and physical health versus nonhealth incentives? Second, what is the most effective balance of *direct* versus *indirect strategies* in health contexts? Campaigns increasingly rely on messages targeted to *interpersonal influencers* and on *media advocacy* approaches aimed at the general public and policy makers, but what is the appropriate way for these approaches to be intermingled? Third, how can campaigns *communicate effectively with young people*, who exhibit fundamentally different appraisals of risk and future consequences, who are using radically different interactive and personal media, and who are deeply embedded in peer networks?

Fourth, what is the impact of various *quantities of campaign messages?* What is the critical mass of stimuli needed to achieve meaningful effects on key outcomes, and what is the optimum frequency of repetition for a particular message execution? Fifth, what is the relative impact of various *channels for disseminating messages*? Specifically, what are the appropriate roles to be played by traditional media versus new technologies, and which of dozens of digital media devices can make meaningful contributions to health? Sixth, how can strategists reduce counterproductive effects at the individual and society levels? Promotion of cancer screening may lead to a rise in detrimental tests and treatments, recommending sunscreen use may produce a false sense of protection, fear appeals may create anxiety rather than coping responses, and depicting drugs as forbidden fruit may arouse curiosity. Finally, how can campaigns effectively overcome the *unhealthy influences of entertainment, news, and advertising messages* on highprofile health issues, such as drinking, smoking, safe sex, and violence?

Conclusion

Most experts conclude that contemporary public communication campaigns attain a modest rather than strong impact. This appears to be the case for health campaigns, which are characterized by limited effects on the health behaviors in most cases. The inability to attain strong impact can be traced to meager dissemination budgets, unsophisticated application of theory and models, and poorly conceived strategic approaches. It is also due to the difficulty of the task facing the health campaigner in surmounting the challenge of influencing resistant people to adopt difficult practices or sacrifice pleasurable activities.

In these situations, the pragmatic strategy may be to emphasize relatively attainable impacts:

aiming at the more receptive focal segments, promoting more palatable positive products perceived to have a favorable benefit-cost ratio, creatively generating free publicity, and shifting campaign resources to indirect pathways that facilitate and control behavior of the focal segment via interpersonal, network, organizational, and societal influences. These emphases are not playing the expectations game, but can lead to substantive improvements in effectiveness. More generally, the degree of campaign success can be enhanced via greater diversification of influence pathways, of recommended behaviors, and of persuasive appeals beyond the approaches conventionally used in health campaigns. In addition, campaign strategists should realize that the optimum campaign mix incorporates elements to supplement persuasive appeals for influencing attitudes and behaviors; there are important roles for messages that simply impart new knowledge, enhance salience, deliver educational lessons, provide reminders to act, and stimulate information seeking.

Despite the array of barriers that diminish campaign effectiveness, the research literature shows important success stories over the past several decades. Health campaigns have made significant contributions to the progress in addressing pressing problems, such as smoking, seat belt use, drunk driving, AIDS, drug use, and heart disease. These effective campaigns tend to be characterized by theoretical guidance and rigorous evaluation, substantial quantity of message dissemination over sustained periods, widespread receptivity to the advocated action and accompanying persuasive incentives, and supplementation of mediated messages by campaign-stimulated factors, such as informal interpersonal influences and social engineering policy initiatives.

With the increasing implementation of increasingly sophisticated strategies and the rising societal priority of healthier behavior, there is a sound basis for optimism that campaigns can produce stronger impacts in the future. The ideas outlined in this chapter offer some promising approaches for scholars and practitioners to consider in developing the next generation of health campaigns.

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