Theory and Principles of Public Communication Campaigns

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Public communication campaigns can be defined as purposive attempts to inform or influence behaviors in large audiences within a specified time period using an organized set of communication activities and featuring an array of mediated messages in multiple channels generally to produce noncommercial benefits to individuals and society (Rice & Atkin, 2009; Rogers & Storey, 1987).

The campaign as process is universal across topics and venues, utilizing systematic frameworks and fundamental strategic principles developed over the past half century. Campaign designers perform a situational analysis and set objectives leading to development of a coherent set of strategies and implement the campaign by creating informational and persuasive messages that are disseminated via traditional mass media, new technologies, and interpersonal networks.

THEORETICAL FOUNDATIONS OF CAMPAIGNS

Although no specific theory has been developed to explain and predict public communication campaigns, a number of theoretical perspectives are regularly invoked to guide campaign strategies. The most comprehensive applicable conceptualizations are the *social marketing* framework and the *Communication-Persuasion Matrix.*

Campaigns across the spectrum of health, prosocial, and environmental domains share some similarities to commercial advertising campaigns. Thus, it is useful to apply social marketing, which emphasizes an audience-centered consumer orientation and calculated attempts to attractively package the social product and utilize the optimum combination of campaign components to attain pragmatic goals (Andreasen, 1995, 2006; Kotler, Roberto, & Lee, 2002; McKenzie-Mohr, 2011). Social marketing offers a macro perspective, combining numerous components, notably the multifaceted conceptions of product, costs, and benefits, as well as audience segmentation, policy change, and competition (see Bracht & Rice in Chapter 20 and Rice & Robinson in Chapter 16).

In McGuire's (Chapter 9) classic *Communication-Persuasion Matrix,* or input–output model, the communication *input variables* include source, message, channel, and audience; these factors, which are central to most communication models, will be discussed at length in subsequent sections. The *output process* posits audience responses to campaign stimuli as proceeding through the basic stages of exposure and processing before effects can be achieved at the learning, yielding, and behavior levels. *Exposure* includes the simple reception of a message and the degree of attention to its content. *Processing* encompasses mental comprehension, pro- and counterarguing, interpretive perceptions, and cognitive connections and emotional reactions produced by the campaign message. *Learning* comprises information gain, generation of related cognitions, image formation, and skills acquisition. *Yielding* includes acquisition and change in attitudes, beliefs, and values. *Behavior* in the campaign context involves the bottom-line enactment of the actions recommended in messages.

Specific central theories that are applicable to various aspects of public communication campaign strategies, processes, and implementation include:

Agenda setting (McCombs, 2004). The phenomenon of topical salience applies to campaign impact on the perceived importance of societal problems and the prominence of policy issues.

Diffusion of innovations (Rogers, 2003). This theory introduces the ideas of relative advantage and trialability of recommended behaviors, and the individual adoption decision process, as well as opinion leadership that shapes diffusion through interpersonal channels and social networks via multistep flows.

Elaboration Likelihood Model (ELM) (Petty & Cacioppo, 1986) and *Heuristic Systematic Model (HSM)* (Eagly & Chaiken, 1993). ELM and HSM highlight the role of audience involvement level as it shapes cognitive responses, thought generation, and central versus peripheral routes to persuasion.

Extended Parallel Process Model (Stephenson & Witte, 2001). Effectiveness of fear appeals is enhanced by understanding cognitive processes that control danger versus emotional processes, which control the fear via denial or coping; perceived efficacy influences type of response.

Health Belief Model (HBM) (Becker, 1974). Several concepts from HBM pertain specifically to the potency of health threat appeals: susceptibility multiplied by seriousness of consequences and the self-efficacy and response efficacy of performing the recommended behavior.

Instrumental learning (Hovland, Janis, & Kelley, 1953). As adapted to mediated communication, this learning mechanism features message-related concepts of source credibility, reinforcement incentives, and repetition of presentation.

Integrative Theory of Behavior Change (Cappella, Fishbein, Hornik, Ahern, & Sayeed, 2001). The multifaceted model integrates HBM, Social Cognitive Theory (SCT), and Theory of Reasoned Action (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.

Message frames (O'Keefe & Jensen, 2007; Quick & Bates, 2010). This framework focuses on how message appeals are packaged in terms of gain-frame promotion of positive behavior versus loss-frame prevention of negative behavior, especially for audiences likely to display reactance.

Self-Efficacy (Bandura, 1997). This key construct highlights the role of the individual's perceived capability of successfully performing behaviors; those who are confident of carrying out recommended actions are more likely to attempt and sustain behavioral enactment efforts.

Social Cognitive Theory (Bandura, 1986). SCT emphasizes the processes by which source role models, explicitly demonstrated behaviors, and depiction of vicarious reinforcement enhance the impact of mediated messages.

Theory of Reasoned Action (Ajzen & Fishbein, 1980; Ajzen, Albarracin, & Hornik, 1997). The TRA and the ensuing *Theory of Planned Behavior (TPB)* formulate 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 beliefs about the likelihood that given behavior leads to certain consequences, multiplied by one's evaluation of those consequences.

Transtheoretical Model (Prochaska & Velicer, 1997). This stage-of-progression model identifies subaudiences on the basis of their stage in the process of behavior change with respect to a specific health behavior (precontemplation, contemplation, preparation, action, or maintenance), which shapes the readiness to attempt, adopt, or sustain the recommended behavior.

Uses and gratifications (Katz, Blumler, & Gurevitch, 1974; Rubin, 2002). This offers concepts useful in understanding audience motivations for selecting particular media, attending to media messages, and utilizing learned information in enacting behaviors.

AUDIENCE SEGMENTATION AND CAMPAIGN DESIGN

Identifying the Audience

Campaign design begins with a conceptual assessment of the situation to determine opportunities and barriers and to identify which outcome behaviors would be performed by which people (Atkin & Salmon, 2010; see also Dervin & Foreman-Wernet, Chapter 10). Rather than attempting to reach the broad public, campaign designers typically identify specific (often "at risk") 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, message efficiency can be improved if subsets of the audience are prioritized according to their centrality in attaining the campaign's objectives as well as receptivity to being influenced. Second, effectiveness can be increased if message content, form, style, and channels are tailored to the attributes and abilities of subgroups.

The design specifies *focal segments* of the population whose practices are at issue and the primary *focal 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 (ideally grounded in one or more theoretical models). The next phase is to examine the model from a communication perspective, specifying *target audiences* that can be directly (or, as noted below, indirectly) reached and *target behaviors* that can be influenced by campaign messages. A sophisticated campaign will seek to affect the most promising pathways guided by a comprehensive plan for combining manifold components and an appropriate theoretical framework matched to the desired outcome and the relevant audiences and social systems.

Direct Effects on Focal Audience Segments

The nature of the substantive problem dictates the broad parameters of the focal audience to be influenced. Most campaigns aim messages directly at the focal segments, which are subpopulations who might benefit from the campaign because they are at risk for harm or in need of help or improvement. The potential for achieving direct effects depends on the relative prevalence of various types of receptiveness among target audience segments. A fundamental receptivity factor is stage of readiness to perform the practice; campaigns typically achieve the strongest impact via triggering or reinforcing messages intended for people who are already favorably predisposed (as argued by the Transtheoretical Model). Another key audience segment includes those who have not yet tried the undesirable behavior but whose background characteristics suggest they are at risk in the near future; many may be receptive to persuasive messages. Those committed to unsuitable practices are not readily influenced by directly targeted campaigns, so a heavy investment of resources to induce discontinuation tends to yield a marginal payoff. Among focal targets, there are demographic, social, and psychological-based subgroups such as higher versus lower income strata, high versus low sensation seekers, those experiencing psychological or social obstacles in accomplishing certain behaviors, and members of different cultures.

Indirect Effects on Interpersonal Influencers and Policy Makers

Rather than relying predominantly on direct persuasion, campaigners may attain greater impact by investing effort and resources in campaign components affecting indirect or secondary target audiences who can 1) exert interpersonal influence on focal individuals or 2) help reform environmental conditions that shape behavior. Media campaigns have considerable potential for motivating interpersonal influencers in close contact with focal individuals as well as producing effects on institutions and groups at the national and community levels (Atkin & Salmon, 2010).

Thus, a second effects strategy is to initiate a multistep flow by disseminating messages to potential *interpersonal influencers* or opinion leaders who are in a position to personally influence focal individuals. Campaigns aim at opinion leader audiences because they tend to be more receptive to campaign messages, and their indirectly stimulated influences are likely

to be more effective than campaign messages directly targeted to the focal segment (Rogers, 2003). Interpersonal influencers can impact behavior through activities such as dispensing positive and negative reinforcement, exercising control via rule making and enforcement, facilitating behavior with reminders at opportune moments, and serving as role models. A major advantage of the interpersonal relationships is that the influencer can customize the messages to the unique needs and values of individuals in a more precise and context-relevant manner than most media messages. 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).

In a third effects strategy, the campaign may seek to alter the environment indirectly by providing messages to societal and organizational policy makers who are responsible for devising constraints and creating opportunities that shape focal individuals' decisions and behaviors. Individuals' decisions are strongly shaped by the constraints and opportunities in their societal environments, such as monetary expenses, laws, industry practices, entertainment role models, commercial messages, social forces, and community services. Policy makers in government, business, educational, medical, media, religious, and community organizations can initiate interventions that alter the environment.

Some reformers combine community organizing and media publicity to advance healthy public policies via *media advocacy.* The media advocacy approach seeks to frame public health issues to emphasize policy-related environmental solutions rather than the usual focus on individual responsibility for good health. Media advocacy is "the strategic use of mass media in combination with community organizing to advance healthy public policies" (Dorfman & Wallack, Chapter 23). It explicitly attempts to associate social problems with social structures and inequities, change public policy rather than individual behavior, reach opinion leaders and policy makers, work with groups to increase involvement in the communication process, and reduce the power gap instead of simply providing more information. The four primary activities involved in media advocacy include 1) develop an overall strategy, which includes formulating policy options, identifying the stakeholders that have power to create relevant change, applying pressure to foster change, and developing messages for these stakeholders, 2) set the agenda, including gaining access to the news media through stories, news events, and editorials, 3) shape the debate, including framing the public health problems as policy issues salient to significant audiences, emphasizing social accountability, and providing evidence for the broader claims, and 4) advance the policy, including maintaining interest, pressure, and coverage over time.

Activists generate news media coverage to mobilize the public to influence policy makers to enact reforms to address health problems, particularly relating to smoking and drinking. Gaining consistent visibility in the news media is a key to achieving an agenda-setting effect, which is particularly important in media advocacy strategies targeted to opinion leaders and policy makers in society. Through agenda setting on health issues, news coverage can mold the public agenda and the policy agenda pertaining to new initiatives, rules, and laws. An important element involves strengthening the public's beliefs about the efficacy 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.

A related means of integrating media and interpersonal communication is to organize campaign activities at the community level (Bracht & Rice, Chapter 20). Community-based campaigning can engage stakeholders at all stages of the process, from contributing design inputs to assisting in implementation to active involvement in consequences; some campaigns explicitly seek to empower communities and activate voluntary associations, government agencies, schools, or businesses to achieve short-term success and help attain sustainability and institutionalization of campaign initiatives. Organizing community campaigns encompasses assessing assets and capacities, developing a collaborative organizational structure, generating cooperation of multiple partners and broad citizen participation, and consolidating program maintenance.

CAMPAIGN MESSAGES AND MEDIA

Strategic Approaches: Prevention Versus Promotion

In seeking to influence behavior, campaigners may decide to promote positive behaviors (e.g., eat fruit, buckle safety belts, recycle paper) or to prevent problematic behaviors (e.g., consuming fats, driving while intoxicated, burning forests). Traditionally, prevention campaigns present fear appeals to focus attention on negative consequences of a detrimental practice rather than promoting the desirability of a positive alternative. This approach is most potent in cases where harmful outcomes are genuinely threatening or positive products are insufficiently compelling.

The social marketing perspective is especially applicable to promoting desirable behavior, which involves offering rewarding gains from attractive "products" (such as tasty fruit, the designated driver arrangement, or staircase exercising). In developing behavioral recommendations in promotional campaigns, designers can draw upon an array of options from the "product line." These target responses vary in palatability associated with degree of effort, sacrifice, and monetary expense; a central strategic consideration in determining the degree of difficulty is receptiveness of the focal segment. The prolonged nature of campaigns enables the use of gradually escalating sequential approaches over a period of months or years.

Message Content: Informational Versus Persuasive

In many campaign situations, informational messages that seek to create awareness or provide instruction play an important role. *Awareness messages* present relatively simple content that informs people what to do, specifies who should do it, or provides cues about when and where it should be done. Even superficial messages can stimulate the audience to seek out richer, in-depth content from elaborated informational resources such as web-pages, books, and opinion leaders. The more complex *instruction messages* present how-to-do-it information in campaigns that need to produce knowledge gain or skills acquisition, including enhancing personal efficacy in bolstering peer resistance and acquiring media literacy skills.

However, the central type of content in campaigns features *persuasive* messages. Most campaigns present persuasion appeals emphasizing reasons why the audience should adopt the advocated action or avoid the proscribed behavior. For audiences that are favorably inclined, the campaign has the easier persuasive task of reinforcing existing predispositions: strengthening a positive attitude, promoting postbehavior consolidation, and motivating behavioral maintenance over time. Because a lengthy campaign generally disseminates a broad array of persuasive messages, strategists often develop a variety of appeals built around motivational incentives designed to influence attitudes and behaviors.

Message Appeals: Persuasive Incentives

Persuasive messages in public communication campaigns frequently utilize a basic expectancy-value mechanism by designing messages to influence beliefs regarding the subjective likelihood of various outcomes occurring; attitudinal and behavioral effects are contingent upon each individual's valuation of these outcomes. The operational formula for preventing risky behaviors is *susceptibility* multiplied by *severity,* using a loss frame to motivate the audience with a high likelihood of suffering painful consequences. The incentive appeals often build on existing values of the target audience, so the messages tend to reinforce the predispositions or change beliefs about the likelihood of experiencing valued consequences.

For campaigns in the health domain, the primary incentive dimensions are physical health, time and effort, economic, moral, legal, social, and psychological. Rather than overemphasizing the narrow dimension of physical health threats (e.g., death, illness, injury), campaigners are increasingly diversifying loss-framed incentive strategies to include other negative appeals (e.g., monetary expense, psychological regret, social rejection), as well as emphasizing gain-framed positive incentives (e.g., valued states or consequences, such as physical well-being, saving money, social attractiveness).

Message Design and Implementation: Qualitative Dimensions

Designing 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 seeks to emphasize one or more of five influential message qualities. First, *credibility* 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. The third dimension emphasizes selection of material and stylistic devices that are personally *involving* and *relevant,* so receivers regard the behavioral recommendation as applicable to their situations and needs. The fourth element is *understandability,* with simple, explicit, and detailed presentation of content that is comprehensive and comprehensible to receivers. For persuasive messages, the fifth factor is *motivational incentives,* as described above. Atkin and Freimuth (Chapter 4) provide much greater detail on the formative evaluation stage of message design.

Message Sources

The *messenger* is the presenter who appears in the message to deliver information, demonstrate behavior, or provide a testimonial. Messengers help enhance each qualitative factor by being engaging (attractiveness, likability), credible (trustworthiness, expertise), and relevant to the audience (similarity, familiarity). These attributes can 1) attract attention and facilitate comprehension by personalizing message concepts, 2) elicit positive cognitive responses during processing, 3) heighten emotional arousal via identification or transfer of affect, and 4) increase retention due to memorability. The key categories of public communication campaign messengers are celebrities, public officials, topical expert specialists, professional performers, ordinary people, specially experienced individuals (e.g., victims or beneficiaries), and unique characters (e.g., animated or costumed).

Mediated Communication Channels: Mass and Digital

In disseminating messages, most campaign designers still rely on traditional broadcast and print channels that carry public service messages, entertainment–education (E–E) placements, and news coverage. Websites displaying prepackaged informational pages have also been a central campaign vehicle since the late 1990s, although campaigns have increasingly utilized interactive technology (whether online or via DVDs or mobile devices) in recent years.

In assessing the dozens of options for channeling campaign messages, campaign 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), *meaning modalities* (array of senses employed in conveying meaning), *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 determined by the usage patterns of target audiences and the nature of the message and topic within the constraints of available resources. Public communication campaigners find it more practical to stage a pseudo event that generates news coverage than to raise funds to purchase time or space in the ideal media vehicle, more feasible to achieve a minor product placement in an entertainment program than to capture the whole plotline, and more economical to place a public service announcement (PSA) on a low-rated, mature adult radio station than on a hot teen station. Certain topics pertaining to health, safety, and the environment are inherently attractive to professionals working in traditional media such as local newspapers, women's magazines, and radio talk shows. The related practice of E–E (Singhal, Cody, Rogers, & Sabido, 2004), which involves embedding campaign topic-related material in entertainment programming, is widely welcomed by media gatekeepers in developing nations but not the United States.

Health interventions and campaigns are increasingly emphasizing digital media technologies (Edgar, Noar, & Freimuth, 2007; Parker & Thorson, 2009; Rice & Atkin, 2009). New media offer additional dimensions of campaigning through interactivity, tailoring, and narrowcasting. *Interactivity* has two primary dimensions, direction of communication and level of receiver control over the communication process, which yield four kinds of relationships between the user and the source (monologue, feedback, responsive dialogue, and mutual discourse). Each of these relationships can be associated with specific design features, such as surveys, games, purchasing products or services, e-mail, hyperlinks, and chat rooms. Interactive media facilitate *tailoring* of customized messages that reflect the individual'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 *narrowcast* messages. Not only does this approach increase the likelihood of learning and persuasion, but it decreases the possibility of boomerang effects.

The Internet has become a major source for information, discussion, therapy, and access to physicians (Rice, 2006; Rice & Katz, 2001). Online health-related support groups can increase social support, quality of life, and self-efficacy in managing one's health condition. The value of anonymity inherent in web information search and online discussion groups is valuable for private or sensitive topics (e.g., STD/HIV prevention and testing). A meta-analysis of 75 randomized controlled health trials involving computer-delivered intervention found improved knowledge, attitudes, intentions, health behaviors, and general health maintenance across a variety of health domains (Portnoy, Scott-Sheldon, Johnson, & Carey, 2008). Another meta-analysis of 85 studies of using the Internet for health behavior change reported an overall small but significant positive effect, with stronger results for interventions applying theory in general and TPB in particular for those applying behavior change techniques and those using other communication approaches, especially text messaging (Webb, Joseph, Yardley, & Michie, 2010). Mobile phone calling and texting are well suited to offer tailored, wide-reaching, interactive and continuing campaign interventions. Cole-Lewis and Kershaw's (2010) review found consistent evidence of the positive effects of text messaging on behavioral changes across demographic and national differences.

Campaigns may utilize online public service promos, typically in the form of brief banner ad messages or solicitations to click through to a website. However, these messages have severe content capacity limitations, the sponsors have little control over placement of their banner ads, and ads are often blocked by computer software. Paid health promotion ads on social media sites have greater potential for impact because of more prominent placement and more precise targeting. Health PSA spots and long-form video messages attract modest viewership on YouTube, although unhealthy portrayals and parodies of the health messages are also featured among the mix of messages accessible on this site.

Blogs serve an important role in linking 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 (such as social support, variations on the persuasive message, or related health news) to motivated audiences at their convenience. Twitter can be used to provide updates and protocol reminders to campaign-specific followers.

Voice response systems, interactive video, DVD, CD-ROM, mobile phones, and computer games can be effective in reaching young people. Lieberman (Chapter 19) recommends that computer-mediated campaigns feature youthful genres, support information seeking, incorporate challenges and goals, use learning by doing, create functional learning environments, and facilitate social interaction. Video game learning relevant to campaigns includes skill acquisition from interactive games, improved self-efficacy through success in vicarious experiences, and role-playing and modeling. Baranowski, Buday, Thompson, & Baranowski (2008)'s meta-analysis of 25 studies of using video games to affect health behavior (chronic disease management, exercise, and diet) found improvements in nearly all outcomes.

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 helps develop a select number of nonprofit messages each year, both responding to and influencing campaign agenda items. For example, its current public service campaign topics include 11 community issues (from energy efficiency to pet shelters), eight education issues (from college access to lifelong literacy), and 27 health and safety issues (from autism awareness to nutrition education) (see http://www.adcouncil.org/default.aspx?id=15). Moreover, 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.

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 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 highly ranked 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 realities of public service promotion and problem prevention often require exceptional persistence of effort over long periods

of time to attain a critical mass of exposures. 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.

CAMPAIGN EVALUATION METHODS

Formative Evaluation

The applicability of general campaign design principles depends on the specific context (especially types of audiences to be influenced and types of product being promoted), so effective design usually requires extensive formative evaluation inputs (Atkin & Freimuth, Chapter 4). 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 learn about audience predispositions, channel usage patterns, and evaluations of prospective sources and 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 can be measured in message testing laboratories.

Process Evaluation

While the campaign is underway, *process evaluation* assesses the extent to which designed elements are actually implemented and ways in which the campaign program can be improved for subsequent designers and implementers (Steckler & Linnan, 2006). Process evaluation is useful for determining effectiveness of campaign management and identifying lessons for overcoming social and structural obstacles.

Summative or Outcome Evaluation

After a campaign has been implemented (but planned and integrated from the beginning), summative evaluation research is performed to assess outcomes. Valente and Kwan (Chapter 6) summarize the basic methodologies, including field experimental, cross-sectional, cohort, panel, time-series, or event-history designs, although qualitative components and mixed-methods evaluations provide unique, additional, and triangulated insights. Summative research can be conducted both during and after major campaign phases.

Campaign Effectiveness

Research findings suggest that campaigns are capable of generating moderate to strong influences on cognitive outcomes, less influence on attitudinal outcomes, and still less influence on behavioral outcomes (Atkin, 2001; Snyder & LaCroix, Chapter 8). Further, behavioral outcomes tend to vary in proportion to such factors as the dose of information, qualitative potency of messages, integration of mass and interpersonal communication

systems, and integration of social-change strategies (enforcement, education, and engineering; see Paisley & Atkin, Chapter 2).

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 tend to diminish for receivers who regard messages as offensive, disturbing, boring, stale, preachy, confusing, irritating, misleading, irrelevant, uninformative, useless, unbelievable, or uninspiring.

Salmon and Murray-Johnson (Chapter 7) 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).

FUTURE CHALLENGES

Despite considerable progress in recent years, a variety of theoretical and practical challenges and tensions remain to be addressed. Future research is needed to better understand the issues pertaining to campaign design, implementation, and resource allocation outlined in this section.

What is the optimum mix of message incentives? Most campaigns use multiple persuasive appeals, but not enough is known about the most effective combination of gain-frame versus loss-frame messages and of fear appeals versus other negative appeals. What should be the relative emphasis on short-term versus long-term objectives and effects, and how can campaigns achieve longer-term outcomes? How can campaigns successfully promote a *prevention* approach in order to avoid the more expensive *treatment* approach typically favored by organizations, government agencies, and the electorate?

What is the most effective balance of *direct* versus *indirect strategies* in various contexts? Campaigns increasingly rely on messages targeted to interpersonal influencers and on media advocacy approaches aimed at the general public and policy makers, but the appropriate blending of these approaches has not been identified. Beyond the predominant focus on individual benefits, campaigns must address important social problems involving community and collective benefits. What are the relative influences of individual differences versus social structure on the problems motivating communication campaigns? How can campaigns communicate effectively with young people who exhibit fundamentally different evaluations of risk and future consequences, who are using radically different interactive and personal media, and who are deeply embedded in peer networks?

What is the impact of various quantities of campaign messages? Research should examine the minimum volume of stimuli needed to achieve meaningful effects on key outcomes and the quantitative point of diminishing returns from larger volumes. With respect to repetition, it would be helpful to know at what point wear out occurs for a particular message execution.

Finally, what is the relative impact of various channels for disseminating messages? Specifically, researchers need to assess the influence of each new communication technology that is introduced to determine the cost-effectiveness of paid advertisements, to fine-tune the mixture of education and entertainment in *infotainment* that's embedded in commercial media, and to examine the roles of diverse options such as television, posters, websites, mobile devices, and personal outreach. Intriguingly, the ease of users creating their own messages, and the involvement of those users in a variety of online and mobile media, provide the potential for much more engagement by focal audiences and their communities in future campaigns. In particular, the constantly evolving landscape of mediated communication will revolutionize the campaign of the future; research is needed to monitor opportunities and assess the potential of new applications. Moreover, campaigns will need to devise approaches for overcoming the simultaneous pervasive negative influence of counterproductive mass media messages on campaign issues such as drinking, violence, and environmental damage.

Conclusion

Most experts conclude that contemporary public communication campaigns attain a modest rather than strong impact, notably on the health behaviors. This is partially due 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 campaigner, who may be promoting complex or difficult behaviors, targeting resistant audience segments, or coping with limited resources, while at-risk audiences are constantly exposed to peer influences, entertainment portrayals, and advertisements that highlight, encourage, and positively frame detrimental behaviors. In these situations, more emphasis should be given to relatively attainable impacts by aiming at more receptive focal segments, by promoting more palatable positive products perceived to have a favorable benefit-cost ratio, by creatively generating free publicity, and by shifting campaign resources to indirect pathways that facilitate and control behavior of the focal segment via interpersonal, network, organizational, and societal influences. More generally, the degree of campaign success can be improved via greater diversification of pathways, products, incentives, and channels beyond the approaches conventionally used in public communication campaigns.

Despite the array of barriers that diminish campaign effectiveness, the research literature shows many success stories over the past several decades. Health campaigns have made significant contributions to the progress in addressing important 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.

Greater success can be attained if campaigners play to the strengths of the mass media for influencing cognitively oriented variables (e.g., by imparting new knowledge, enhancing salience of a problem or product, teaching people new techniques, and stimulating information seeking). Moreover, the relatively small collection of packaged messages such as PSAs can be augmented by generating publicity and by sensitizing audiences to respond to congruent content available in the media. Quantity can be increased by pursuing monetary resources to enable paid placements and by using creative and political resources to generate free publicity and engineer healthy entertainment portrayals.

With the increasing adoption of sophisticated strategies and the rising priority of healthy and prosocial practices for individuals and society, there is a sound basis for optimism that campaigns can produce stronger impacts in the future. The ideas outlined in this chapter (and elaborated in the following chapters) offer some promising approaches for designers to consider in developing the next generation of campaigns for addressing societal problems.

ADDITIONAL RESOURCES FOR CAMPAIGN DESIGN AND RESEARCH INFORMATION

Theories, designs, and impacts of media-based public campaigns are summarized in chapters by Abroms and Maibach (2008); Atkin and Salmon (2010); Randolph and Visnawath (2004); Rice and Atkin (2009, 2011); Salmon and Atkin (2003), and Silk, Atkin, and Salmon (2011). Key book-length theoretical perspectives and reviews include Atkin and Wallack (1990); Backer, Rogers, and Sopory (1992); Edgar, Noar, and Freimuth (2007); Green and Tones (2010); Hornik (2002); Kotler, Roberto, and Lee (2002); Lundgren and McMakin (2009); Maibach and Parrott (1995); O'Keefe (2002); Perloff (2003); Rice and Atkin (2001); Rogers (2003); Salmon (1989); Stiff and Mongeau (2003); and Witte, Meyer, and Martell (2001). The encyclopedic overview of the broad topic of communication campaigns by Rice and Atkin (2011) provides a useful resource listing of annotated publications and websites organized into 17 sections: basic source books, pertinent academic journals, summary of major theoretical perspectives, social marketing, campaign design, new media, formative evaluation, campaign implementation, community and media advocacy issues, general health topics, HIV/AIDS, nutrition, drugs, smoking, human rights, environment, and evaluation of campaign impact. Additional links to online resources are available at http://www.comm.ucsb.edu/faculty/rrice/ricelink.htm#CAMPAIGN.

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