DOCUMENT RESUME

ED 233 356 CS 207 693

AUTHOR O'Keefe, Garrett J.
TITLE "Taking a Bite Out of Crime": The Impact of a Public Information Campaign.
SPONS AGENCY Department of Justice, Washington, D.C. National Inst. of Justice.
PUB DATE Aug 83
GRANT 81IJX0050
NOTE 57p.; Paper presented at the Annual Meeting of the Association for Education in Journalism and Mass Communication (66th, Corvallis, OR, August 6-9, 1983). For related document and PSA storyboards, see ED 228 996.
PUB TYPE Speeches/Conference Papers (150) -- Reports - Research/Technical (143)

EDRS PRICE MF01/PC03 Plus Postage.
DESCRIPTORS *Advertising; Behavior Modification; Community Cooperation; *Community Information Services; *Crime Prevention; *Mass Media Effects; Media Research; *Motivation Techniques; Program Effectiveness
IDENTIFIERS *Media Role; *Public Service Advertising

ABSTRACT

In contrast with earlier findings indicating that public information campaigns produce little change in public attitudes and behaviors, current research suggests that the Advertising Council's "Take a Bite Out of Crime" campaign, initiated in 1979, has had a substantive impact on the public's response to crime prevention. Data from a national survey of public reactions to the campaign, as well as a panel sample examining changes in citizen crime prevention orientation, suggest that the public service messages have made people more aware of prevention techniques, more optimistic about the effectiveness of citizen-instituted prevention activities, and more involved in actively preventing crime. As a direct result of the televised messages, nearly one-quarter of the exposed survey respondents adopted additional safety measures such as leaving on their outside light, or asking neighbors to watch their house when they were away. Most significantly, an increasing number of respondents became involved in neighborhood crime prevention techniques. The failure of the campaign to increase either concern about crime or a sense of responsibility for its prevention may, in one sense, be a positive feature, as it indicates the campaign heightened public awareness of a problem without increasing the individual's sense of vulnerability. (MM)

"TAKING A BITE OUT OF CRIME": THE IMPACT OF A PUBLIC INFORMATION CAMPAIGN[1]

Garrett J. O'Keefe
Center for Mass Communications Research and Policy
Department of Mass Communications
University of Denver

Paper presented at Theory and Methodology Division,
Association for Education in Journalism and Mass Communication
Annual Convention, Corvallis, Oregon, August 1983

[1]The research reported was supported under a grant from the National Institute of Justice, U.S. Department of Justice (Grant No. 81IJX0050). The author thanks Prof. Harold Mendelsohn, Kathaleen Nash, Elise Henry, and Beth Rosenzweig for their assistance on various phases of the project.

(ABSTRACT)

"TAKING A BITE OUT OF CRIME": THE IMPACT OF A PUBLIC INFORMATION CAMPAIGN

Recent studies of the impact of public information campaigns indicate they may have greater efficacy than the research of previous decades suggested. This paper presents preliminary data from an ongoing study-in-progress which supports that view. Summarized are results of an evaluation of the public impact of the Advertising Council's "Take a Bite Out of Crime" campaign, aimed at promoting greater citizen involvement in crime prevention activities.

The data are derived from a national sample survey of public reactions to the campaign, as well as a panel sample examining changes in citizen crime prevention orientations and behaviors as a function of exposure to the campaign.

The findings suggest that the Advertising Council's Take a Bite Out of Crime PSAs had marked and consistent influences on citizen perceptions and attitudes regarding crime prevention, as well as on their taking of specific preventative actions.

Individuals exposed to the campaign exhibited significant increases over those not exposed in how much they thought they knew about crime prevention; how effective they thought citizen prevention efforts were; and how confident they felt about being able to protect themselves from crime. The PSAs also appeared to have a strong impact on the taking of crime prevention actions by citizens. Exposure to the campaign was significantly related to increases in six of the seven specific preventative activities most emphasized in televised PSAs. Particularly noteworthy were campaign-related increases in neighborhood cooperative crime prevention efforts.

Taken at face value, these findings go far in refuting many of the hypotheses and assumptions concerning campaign efficacy posed in earlier decades. And, they tend to support more recently suggested views of the media having the potential for more substantial persuasive effects.

(BRIEF ABSTRACT)

A panel survey study of the influences of the Advertising Council's "Take a Bite Out of Crime" public information campaign suggests that such campaigns have greater efficacy than the research of previous decades had indicated. The findings provide evidence that the campaign had significant effects on citizen perceptions of and attitudes toward crime prevention, and on their taking of specific preventative actions. The results overall tend to support a view of the media as having an increased potential for persuasive impact.

While public service-oriented media campaign effects research has a long tradition going back to now-classic field studies of the 1940s and early 1950s, the area went through a period of relative dormancy until fairly recently. At least partly at the root of that dormant period in the late 1950s and 1960s were inferences from the previous research that media campaigns were apt to have few if any effects, and when they did occur they were likely to be among particular segments of the population who were primarily seeking reinforcement of their already existing attitudes and behaviors (cf. Star and Hughes, 1950; Hyman and Sheatsley, 1947; Klapper, 1960). Such "limited effects" hypotheses were by no means peculiar to campaign research; indeed, early studies of media effects on such diverse activities as childhood socialization, aggressive behavior, and voting behavior generally reached the same kinds of conclusions.

However, research endeavors into these same areas over the past decade have led to substantially revised conceptions of the kinds of effects media are capable of having on individual and social behavior. Perhaps the two most notable examples have involved: (1) Examinations of the effects of violent media portrayals on the aggressive behavior of audience members; and (2) The effects of political media content, especially during election campaigns, on citizens' political cognitions, attitudes and behaviors. In both instances, while the gravity and extent of the media influences are open to argument, the empirical evidence is clearly supportive of the media having the potential for doing more than simply reinforcing a psychological status quo among audience members.

The increased potential for media influence in contemporary society should not seem overly surprising. While the underlying social processes remain largely open to inquiry, it is clear that mass media have taken a far more visible role as sources of information, and perhaps influence as well. The predominance and immediacy of television undeniably plays a part in all this, but also important are changes in the social and political structure of the society itself. For various reasons, social and political institutions and processes are not as stable as they appear to have been in the 1940s and 1950s. Greater geographic mobility, the

changing makeup and role of family, and a lessening of the impact of traditional social ties and values, to name a few things, have perhaps led to somewhat greater reliance on more "impersonal" sources of information and influence, such as mass media.

While research on the persuasive effects of public information campaigns was in the forefront of the media studies of three decades ago, there have been only few and widely scattered efforts in recent years (cf. Atkin, 1979; Douglas et al, 1970; Farquahar, 1977; Hanneman and McEwen, 1973; Maccoby and Solomon, 1981; McAlister, et al, 1980; Mendelsohn, 1973; O'Keefe, 1971; Salcedo et al, 1974; Schemeling and Wotring, 1976). However, the collective findings from these studies suggest rather strongly that such campaigns may have noteworthy effects on audiences. Perhaps the most striking data, as well as conceptual elaborations, are found in the multi-year community heart disease prevention project underway at Stanford University (cf. Maccoby and Solomon, 1981). Those results suggest rather salient effects of mass media messages per se on public cognitions, attitudes and behaviors concerning heart disease prevention.

One difficulty found throughout the recent research on campaigns has been a lack of consistent conceptual or theoretical perspectives to guide problem development and design. However, as more data-centered evaluative studies continue to contradict the earlier limited effects-related hypotheses, more elaborate models will surely be developed. And, they are likely to be based upon assumptions that it is critical to investigate the contingencies under which different media messages result in different effects for different kinds of people under different circumstances and at different points in time. That is, media effects are unlikely to be found en masse, or to be attributable to any one set of factors. Rather, it may be more important to determine which factors are most operative in given communication situations involving given audiences.

The purpose of this paper is to report preliminary data from an ongoing study-in-progress, which we feel has several strong implications for the way in which we look at the efficacy

of public information campaigns. It is intended as a summary of results to date, and is more descriptive than inferential in nature. More comprehensive and detailed background information on the project are available from the author (O'Keefe, 1982a; b) and in a final report scheduled for summer 1983.

BACKGROUND AND METHODOLOGY

The campaign in question is the Advertising Council's "Take a Bite Out of Crime" public service advertising campaign, produced under the sponsorship of the Crime Prevention Coalition. The campaign has been running since December 1980, and has attained, by the Advertising Council's standards, an unusually high degree of gratis placement in the nation's media channels. The campaign is aimed at promoting citizen involvement in crime prevention efforts, mainly through increased burglary self-protection, and, most notably, through neighborhood cooperative efforts among citizens.

By most critical accounts, the campaign caught on in terms of media placement because of the soaring concern over crime in recent years, and its use of a rather clever cartoon dog, "McGruff," arrayed in trenchcoat and admonishing citizens to follow the example of "real people" prototypes who through various means helped "Take a bite out of crime." From a research perspective, the campaign unfortunately presents several obstacles to well-controlled evaluation of its effects on citizens. For one, while the investigators, under the sponsorship of the U.S. Department of Justice National Institute of Justice, received the full cooperation of the Advertising Council and Crime Prevention Coalition in examining the campaign's design and strategy, little was possible in the way of pre-campaign research input. Secondly, the national-scale dissemination logistics of the campaign negated any ability on our part to "control" the dissemination for evaluative purposes.

The campaign in total incorporates the more obvious media campaign utilizing public service advertisements, and perhaps less obvious but potentially equally important community projects in hundreds of locales all over the U.S. The localized projects are highly diversified and dependent

upon individual community needs and resources. The media campaign serves as something of an umbrella for these, providing a shared identity and rationale. Our concern in this study at this point is almost exclusively with the impact on the public-at-large of the media campaign. Nationwide, the public service advertisements were, as of November 1981, by far the most visible aspect of the campaign, and the aspect of it with the greatest potential for impact on citizens overall as of that time.

Conceptual Background

In the most general terms, we view the campaign as having been largely concerned with effecting increased citizen competence in helping to reduce crime. The term "prevention competence" serves as an organizing rubric encompassing several kinds of orientations and behaviors through which citizens may demonstrate their ability in the crime prevention arena. Prevention competence is likely to increase among citizens to the extent that they:

(1) Are more fully aware of effective prevention techniques;
(2) Hold positive attitudes about the effectiveness of citizen-initiated prevention activities, and about their own responsibility for getting involved in prevention; (3) Feel capable about carrying out actions themselves to reduce their chances of victimization; (4) Are concerned about protecting themselves and others from crime; and (5) Actually engage in actions aimed at reducing crime.

Thus prevention competence includes the same general constellation of dependent variables often found in communication effects and persuasion studies. With varying degrees of conceptual sophistication, persuasion is usually apt to be seen as at least a four-step process involving: (1) The building of awareness or knowledge; (2) The inducement of attitude change; (3) Motivating individuals toward behavior by generating interest or concern; and (4) Finally effecting behavioral change (cf. McGuire, 1969; Percy and Rossiter, 1980; Cialdini et al, 1981; Solomon, 1981).

While this sequence of potential campaign-induced events has a nice logic about it, rarely can even well-designed and carefully targeted media campaigns be expected to successfully induce changes on their own along all of the above dimensions. For one thing, the degree to which persuasion may occur is highly dependent upon existing audience dispositions concerning the

topic or issue at hand. Some issues are simply more change-resistant than are others. And, when media campaigns in of themselves are effective to any degree, it is likelier to be in terms of providing increased knowledge or, perhaps, in changing attitudes. As Bandura (1977) has cogently theorized and as Farquhar et al (1977), Maccoby and Solomon (1981), and McAlister et al (1980) have demonstrated empirically, people are more likely to act on information acquired from mass media sources when appropriate social and environmental supports are present. There are indeed several ambiguities and problems in interpreting the specific types of changes, and the processes underlying them, which may be influenced at least in part by public information campaigns.

Moreover, it is also possible that media messages may induce action-taking without necessarily effecting congruent cognitive or attitudinal changes. This would seem particularly true of actions requiring little rationalization, cost or effect (Ray, 1973).

It is also important to note that the Take a Bite Out of Crime campaign, particularly insofar as the PSAs are concerned, was aimed at "the public" in a highly diversified manner. A reasonable possibility exists that the campaign would have scattershot influences on various types of people depending upon their already existing orientations toward crime and prevention--perhaps simply informing some, changing selected attitudes in others, making still others more concerned, and perhaps triggering some into action. For example, if a particular citizen is already concerned about crime, and already feels that self-prevention techniques may be effective, the campaign may have provided information about specific prevention techniques and how to use them, prompting "action."

The public service advertisement format renders placement of specific ads within specific locales over the country quite haphazard and dependent upon the willingness of media outlets to incorporate them as space and time permit. Moreover, the design of the campaign made no allowance for attempted dissemination of the PSAs in particular communities while withholding the messages from others, making classic "treatment versus control community" field experiment designs impossible. Thus our overall research effort is based upon the "next best" design options available: (1) The use of a national sample survey to determine the reach or penetration of the campaign over the nation as a whole and within various kinds of citizen subgroups;

and to examine citizen self-evaluations of the impact and effectiveness of the campaign; and (2) The incorporation of a panel survey in which respondents interviewed in 1979 prior to the campaign's release would be reinterviewed in 1981, for the purpose of examining changes in their crime prevention orientations and attempting to trace those to exposure to the campaign.[1]

The national sample survey, subcontracted to the Roper Organization, was conducted with a standard multi-stage probability sample of 1,200 adults interviewed in their homes for approximately 45 minutes during November 1981. The questionnaire included unaided and aided recall measures of exposure to the campaign PSAs and extensive self-report measures of their perceived impact upon the respondents. Other items focused upon citizen cognitions, attitudes and behaviors concerning crime and its prevention; media habits in general, and demographic indicators.

The panel survey encompassed a probability sample of 1,049 adults initially interviewed in person in Buffalo, Denver and Milwaukee in September 1979, three months prior to the campaign's onset. The three locales were chosen to provide diversity in regional characteristics and crime rate profiles, while assuring an adequate media mix for at least potentially moderate distribution of the McGruff campaign PSAs. The second round of interviews was carried out by telephone in November 1981, with 426 of the original respondents (41 percent) being successfully reinterviewed. Respondents' self-reports as to whether they recalled having been exposed to the PSAs served as the basis for separating the sample into an "experimental" group (those exposed) and a control group. Potential effects of that exposure in terms of changes in orientations toward crime and crime prevention were examined by means of simple before-after group comparisons, and by more stringent multivariate control procedures.

---

[1] Such panel designs are somewhat flawed in the ability to remove interactive "threats" to the external validity of the inferences, most notably test interation, when used in rigorous testing of hypotheses (cf. Campbell and Stanley, 1963; Cook and Campbell, 1979). However, they can be quite appropriate in pointing to general trends insofar as campaign exposure and effectiveness are concerned. This is particularly true given the added advantage of comparing the campaign-related changes found in the panel with respondents' own self-reports and interpretations from the national sample.

RESULTS

While our major concern in this paper will be with an overview of the findings on the campaigns's effects, it is useful to begin by briefly summarizing the results concerning the rather sizeable extent of exposure to the McGruff PSAs.

The national sample analysis found that over half (52 percent) of the respondents recalled having seen or heard at least one of the Take a Bite Out of Crime PSAs, primarily over television, and a third of the sample had encountered them more than 10 times. The campaign also appeared to be reaching a highly diversified audience demographically, with little indication that persons in any particular social or economic strata were beyond the scope of the PSAs. (Something of an exception was age level, with younger persons decidedly more likely than older ones to report exposure; nonetheless, a third of respondents over age 64 could recall the McGruff ads.) Persons who regularly either watched more television or listened more to the radio were likelier to have come across the ads, having of course greater opportunity to do so.

The panel (48 percent exposed) supported the inference drawn from the national sample that the campaign reached a broad-based population demographically. Moreover, while there was a tendency for persons perceiving themselves as less knowledgeable and prevention measures as more effective to have been exposed, the PSAs appear to have reached goodly numbers of individuals with widely varying perceptions and orientations regarding crime and its prevention. However, attentiveness to the PSAs was much less uniform, with greater attention to them being paid by persons previously more knowledgeable and confident regarding prevention, and those more concerned about protecting themselves. Individuals engaged in more prevention activities were also more attentive, as were those who anticipated that more information about prevention would benefit them. Thus selective exposure was found to be only a minor factor here, perhaps not surprising in an age of ubiquitous television commercials. However, selective attention proved far more prominent.

While, with a few exceptions, exposure rates do seem relatively homogenous across the sample, this should not of course imply that the messages were perceived in the same way by persons with varied orientations to crime and prevention, nor that the messages were as effective for some

individuals as for others. But the findings do testify to the strength of dissemination of the campaign, as well as to the impact of its themes and appeals, in allowing citizens with many varying dispositions toward crime and prevention to at least have had the opportunity to hear the message.

Campaign Effects on Crime Prevention Orientations

The panel sample analysis of the effectiveness of the Take a Bite Out of Crime campaign focused on several components of citizen responsiveness vis a vis crime prevention. The campaign in general, and the public service advertisements in particular, presented citizens with a rather diversified range of appeals, content areas, media formats, and suggestions for actions. Here, we will consider those crime prevention orientations and behaviors which the campaign would seem to have had the greatest potential for influencing during its first two years.

Prevention Orientation Effects

Persons exposed to the campaign showed significant changes in three of the five crime prevention orientation dispositions. Campaign exposure was associated with: (1) Increases in how much respondents thought they knew about crime prevention; (2) More positive attitudes about the effectiveness of citizens taking action to help prevent crime; and (3) Greater feelings of personal competence in protecting oneself from crime. The campaign appeared to have no impact, however, on feelings of personal responsibility for helping prevent crime, or on personal concern regarding crime prevention. These findings held even when controlling for the several possible intervening variables.

Table 1 details these results.[2] Taking the relationship between campaign exposure and self-perceived prevention knowledge in Table 16 as an example, we see that the simple regression analysis yielded a beta value of .09, indicating a positive and significant relationship between campaign exposure and perceived knowledge in 1981, controlling for level of knowledge in 1979. (One-tailed significance levels are used for these analyses, since we are predicting that campaign exposure will result in a change in a specific direction for each dependent variable, e.g. we expect "more" rather than "less" knowledge.)

---

[2]The analyses of the panel sample effects data require not only a simple comparison between campaign-exposed and unexposed groups to find out if the

The hierarchical regression analysis in the lower part of the table indicates that the relationship between exposure and perceived knowledge remains significant (beta = .08) when the other potential intervening variables are controlled for.[3]

---

exposed group "changed more," but also the control of extraneous variables which may have interactively influenced either campaign exposure, or the change measure over time, or both simultaneously. While it is impossible to constrain the influence of all potential extraneous variables, we can make some good judgments about what kinds of variables would be most likely to intervene, and control for them accordingly. Toward that end, our analyses utilize a rather stringent hierarchical multiple regression control procedure.

The most obvious potential intervening variables appeared to be: (1) Respondent encounters with crime prevention campaigns other than McGruff; (2) Exposure to crime-related mass media content; and, of course, (3) Direct encounters with crime, or having been victimized. Measures of each of these stimuli were inserted into the regression equation as a block immediately preceding the campaign exposure measure.

As a more conservative device, we also chose to include in the equation as control variables a block of five demographic indicators which appeared most closely associated with campaign exposure and prevention orientations, including age, sex, education, income and neighborhood social status. These were included as a block prior to the above one. It appeared likely that any unidentified extraneous variables tending to influence the change scores would do so unevenly across at least some of those demographics, and thus "controlling" for the demographics should help minimize their impact. It was also hoped that this would help minimize any effects based upon interaction between the pre-campaign interviewing round and exposure to the campaign or other intervening stimuli.

[3] Specifically, the 1979 knowledge score (Time 1 or "T1") was entered as the first block of the regression equation, allowing it to explain as much of the variation in the 1981 (Time 2) knowledge score as it could. In the second block of the equation, the demographic indicators were entered as a "generalized" control on unspecified extraneous variables. The third block consisted of the three factors--apart from McGruff campaign exposure--most likely to directly affect prevention knowedge: (1) Victimization experience; (2) Attention to news and entertainment media crime content; and (3) Exposure to other prevention campaigns. Finally, exposure to McGruff was entered as a dummy variable in the fourth block, with that beta value reflecting the singular impact of campaign exposure on knowledge, with the effects of the other variables on knowledge "controlled out."

The regression analysis for prevention knowledge also indicates that exposure to other prevention campaigns was also associated with gains in knowledge over the two-year period (beta = .10), and that men gained more in knowledge than did women (beta = .08). The possibility that those or other variables may have interacted with campaign exposure so that they acted in combination to affect prevention knowledge will be considered later in the study.

Table 1 also indicates that campaign exposure was not associated with changes in prevention responsibility (uncontrolled beta = -.02; controlled beta = -.03), but that exposure was related to more positive attitudes concerning the efficacy of personal prevention behaviors.
And, changes in prevention confidence, but not concern, were related to exposure to the McGruff campaign.

These findings are strongly supportive of (and in turn are reinforced by) self-reports of respondents in the national sample according to what they said they thought they had gained from PSAs.

The lack of impact of campaign exposure on concern about protecting oneself from crime lends itself to some ambiguity in interpretation. On the one hand, a goal of the campaign is to make citizens concerned enough so that they will act appropriately, but not so concerned as to unduly frighten them. Given a finding that concern about prevention in the 1979 data was substantially correlated with heightened perceptions of crime in one's own environment, and greater personal vulnerability, it may actually be a "plus" for the campaign that it did not significantly increase such concern. Indeed, the PSAs, by emphasizing the most positive approaches to crime prevention, appear to have built more positive citizen dispositions--knowledge, sense of efficacy, and confidence--while at the same time minimizing potentially more negative orientations toward prevention.

Crime Orientation Effects

Before moving ahead into discussing the effects of the campaign on preventative behaviors, it may be helpful to take note of the campaigns's potential for affecting citizen's orientations toward crime per se. It could be argued that while the campaign was having positive influences on certain prevention dispositions, it may have been doing so at the expense of making individuals more fearful of crime or seeing themselves as more vulnerable to it.

The panel sample respondents were asked in both waves of the survey: (1) Whether they thought the crime rate was increasing or decreasing in their neighborhoods; (2) How safe they felt being out in their neighborhoods at night; (3) How dangerous in terms of crime they saw their own neighborhoods as compared to others; (4) How likely they thought it was that their residences would be burglarized; and (5) How likely they thought it was that they would be attacked or robbed.

The findings presented in Table 2 suggest that the campaign had virtually no impact on respondents' perceptions of crime within their immediate neighborgoods. No meaningful changes in perceptions of crime rate, sense of personal safety at night, or comparative neighborhood danger were found to be associated with exposure to the campaign. However, the campaign did appear to have some effect on perceptions of likelihood of victimization, and in a curiously inverse way at that. Persons exposed to the McGruff PSAs significantly lowered their estimations of likelihood of being burglarized. But, campaign exposure was also related to modest increases in perceived probability of being a victim of violent crime. (The uncontrolled relationship was significant at the .01 level; with controls the association dropped to just below significance.) One working hypothesis at this point might be that, since the most prominent features of the campaign dealt with household protection against burglary, the exposed respondents may have felt somewhat assured that what they got out of the campaign would help diminish their chances of burglary. On the other hand, the overall theme of "crime" in the PSAs may have also heightened their general concern about it, channeling that concern more into thoughts about violent crime, which most of the PSAs dealt very little with.

It also appears that attention to media crime content in general is strongly related to many citizen orientations toward crime, particularly their perceived vulnerability. The previous tables also picked up a positive relationship between media crime attention and prevention concern and the perceived effectiveness of citizen prevention techniques. While more fully developed analyses of this relationship are beyond our scope here, they will be more fully considered later in the project.

Campaign Effects on Prevention Activities

The most stringent test of an information campaign's effectiveness is whether changes in people's actual actions or behaviors can be traced to their exposure to the campaign. In the national sample, nearly a fourth of the campaign-exposed respondents said they had taken preventative actions as a result of having seen or heard the McGruff PSAs, and they typically gave such examples as improving household security or helping their neighbors in prevention efforts.

Panel respondents were queried in both 1979 and 1981 as to whether or to what extent they were engaged in each of 25 prevention activities aimed at protecting themselves and others from victimization. To the degree that the campaign was effective in stimulating behavioral change, it was expected that persons exposed to it would have been likelier than those unexposed to have either adopted or begun "doing more of" specific kinds of activities.

As others have alluded to (Lavrakas, 1980; Skogan and Maxfield, 1981) and as we will detail in the final report on this project, categorizing the full set of prevention activities is a complex undertaking due to their diversity. Moreover, some activities may be seen as functionally equivalent to others, and some have greater relevance to certain kinds of people in certain situations. For organizational purposes here, we will tentatively arrange the activities into several discrete groups, building on the groundwork provided by Lavrakas and Skogan and Maxfield. We have generally attempted to order them according to the degree of "cost" involved in implementing or practicing them.

We begin with the most effortless behaviors of locking doors or leaving on lights when out, moving to more effortful actions such as asking neighbors or police to watch the house, to cooperating with neighbors or joining prevention groups. We conclude with more costly actual "purchases" such as buying burglar alarms, theft insurance and the like. We also include under purchases any employment of professional prevention resources such as having police do a household security check. Even though usually "free of cost," the effort can be quite time-consuming.

Obviously, some individual actions are going to be relatively easy for some people while costly for others, and we do not offer this schema as a uniform "scale" of difficulty. Rather, it is a way of organizing a wide range of diverse actions in a reasonably coherent manner. Moreover, we have discriminated within the "behavioral" actions and the "purchase" actions by noting ones associated with target hardening, deterrence, surveillance, personal precaution, loss reduction, and cooperation with others, borrowing heavily from Lavrakas and Skogan and Maxfield.

Our full array of preventive actions is as follows:

PREVENTIVE BEHAVIORS

Target Hardening

Locking doors in the home, even when only leaving for a short time.
Keeping doors locked, even when at home.

Deterrence

Leaving on indoor lights when away from home at night.
Leaving on outdoor lights when away from home at night.
When away for more than a day or so, using a time to turn on lights or radio.

Surveillance

When away from home for more than a day or so, notifying police so that they will keep a special watch.
When away for more than a day or so, stopping delivery of things like newspapers or mail, or asking someone to bring them in.
When away for more than a day or so, having a neighbor watch your residence.

Precaution

When going out after dark, going with someone else because of crime.
Going out by car instead of walking at night because of crime.
Taking something along with you when going out that could be used as protection against being attacked, assaulted or robbed.
Avoiding certain places in your neighborhood at night.

Cooperative

(Keeping an eye on) what's going on in the street in front of your home.
(Contacting) police to report a crime or some suspicious activity in your neighborhood.
(Being a part of) a community group or organization in your neighborhood that tried to do something about crime in your neighborhood.

PREVENTIVE PURCHASES

Target Hardening

(Having) your local police do a security check of your home.
(Having) special locks put on your doors or windows.
(Having) an operating burglar alarm system.

Deterrence

(Having) outdoor lights for security.
(Having) anti-theft stickers on doors.
(Having) a dog at least partly for security.

Personal Precaution

(Having) a peephole or window in your door.
(Having) personal security devices such as a gun, tear gas, etc.

Campaign-Relevant Activities

A "test" of campaign effects on prevention action-taking is made even more difficult because of the varying degrees of emphasis placed on specific activities within different components of the campaign. While the televised PSAs focused on a fairly discrete set of activities, print ads covered a much broader range of recommendations, including at one point or another nearly all of those the panel respondents were asked about.[4]

Thus we might argue that "positive" changes, i.e. in the direction of "doing more," in any of the prevention activities among those exposed to the campaign provide some evidence of its impact on behavior. But also, we may have more concrete assurance of the effectiveness of the campaign if more changes are found among those activities that were clearly advocated

[4]There is an additional problem in that local prevention groups may have used the McGruff logo, whether sanctioned or not, as a tie-in to their own campaigns. While we know, for example, that buying or carrying "protective devices" such as guns or tear gas were never advocated in the PSAs or in any other formal aspect of the campaign, we may be less certain as to whether such actions may have been implied by prevention interest groups perhaps using the campaign as a springboard. Furthermore, we have no assurance that some individuals who were prompted by the campaign to view individual action-taking as more effective "translated" that disposition on their own into such behaviors as weapon purchasing.

in the specific PSAs to which respondents were more exposed. Since 71 percent of the respondents said they saw the ads most often over television, it seems reasonable to expect that, to the extent that the campaign was having an impact, it would be best discerned among those activities specifically recommended in the three televised PSAs. (The storyboards for these PSAs are appended.)

Consequently, we might expect the most likely changes to have been in:

* Locking doors when out of the house ("Stop a Crime" PSA)
* Leaving outdoor lights on ("Stop a Crime")
* Using timer lights indoors ("Stop a Crime")
* Having neighbors watch the house ("Stop a Crime")
* Keeping a watch on the neighborhood ("Gilstraps," "Mim Marth")
* Reporting suspicious incidents to police ("Gilstraps," "Mimi Marth")
* Joining with others to prevent crime ("Mimi Marth")

In terms of emphasis, the first four of the above actions were mentioned in the original "Stop a Crime" PSA, but the latter three served as the overall themes for the two more recent ads, "Gilstraps" and "Mimi Marth." As for the other activities, no other specific behaviors (police security checks, not going out at night alone, etc.) were mentioned or alluded to in the televised PSAs, nor were any of the prevention purchases recommended.

Prevention Activity Effects

Out of the seven prevention activities the campaign would seem most likely to have influenced, significant changes associated with exposure to the campaign were found in six. No changes traceable to campaign exposure were found in any of the other activities, save one--having acquired a dog at least partly for security purposes.

This striking finding strongly suggests a marked and consistent influence of the campaign on citizens' crime prevention activities. Moreover, the one

case in which a significant campaign effect was expected but not found was that of more frequently locking doors when leaving the residence. Here, there is strong evidence of a "ceiling effect" precluding measurable change, since 75 percent of the respondents in the first wave of interviews reported "always" locking up to begin with. And, the only significant result found among the "less expected" activities--that of acquiring a dog--is obviously tied to the campaign's overall theme. We turn to the findings in detail.

The analyses follow the same pattern as described earlier for the prevention orientation effects. In Table 3 we see that neither of the target hardening behaviors--locking doors when out of, or when in, the residence had changes significantly associated with campaign exposure, with or without controls inserted. On the contrary, campaign exposure was significantly related to leaving on outdoor lights and using indoor timer lights with greater frequency, both of which were advocated in the "Stop a Crime" televised PSA. No significant campaign effects were found for leaving on indoor lights per se, nor for the surveillance behaviors of having police do a security check, nor for stopping deliveries when out of town.

However, persons exposed to the PSAs were signifcantly likelier to have asked a neighbor to keep an eye on their homes when they were out, as recommended in "Stop a Crime."

None of the changes in the taking of personal precautions when out of the house were related to campaign exposure (Table 4); nor were they mentioned in the televised PSAs. It might be noted that exposure to campaigns other than McGruff was significantly related to changes in three of the four precautionary measures, indicating that there was some publicity given to those actions among the panel cities.

The strongest relationships between McGruff exposure and behavioral changes occurred among the cooperative action-taking steps, which also received the heaviest emphasis in the "Gilstraps" and "Mimi Marth" PSAs. Campaign exposure was significantly correlated with increases in "keeping a watch" outside one's home (beta = .11), reporting suspicious events to the police (beta = .13), and joining crime prevention groups or organizations (beta = .09) (Table 5). The strength of these relationships is particularly noteworthy given that these can be regarded as fairly "costly" actions to take in terms of time and effort--at least certainly moreso than, say,

locking up or leaving on lights. As with the precautionary actions, exposure to prevention campaigns other than McGruff was also significantly related to positive changes in cooperative behaviors, again suggesting community-based campaign efforts advocating such in the panel locales.

On the whole, the PSAs appear to have been most effective in promoting cooperative behaviors, followed by certain deterrence and surveillance actions.

Purchasing Activity Effects

The campaign overall generally downplayed the need for citizens to spend money on property protection by purchasing such things as burglar alarms, theft insurance and particularly, weapons. We have also included under "purchases" activities which require effort in terms of contacting and enlisting the help of professional crime prevention agencies, including having police do security checks, obtaining property I.D. materials, and the like. While some of these latter steps may have been recommended in other components of the Take a Bite Out of Crime campaign, they were not dealt with in the televised PSAs.

The panel findings clearly indicate that campaign exposure was generally unassociated with such purchases made during the period between the two surveys (Tables 6 and 7), with the notable exception of getting a dog "at least partly for security purposes." While the campaign never specifically advocated or remarked on the value of canine acquisitions, apparently the ambiance of the McGruff character and its general identification with "watchdogs" and "taking a bite out of crime" sparked in some respondents a desire for a dog for protection. This result may have been abetted by the rather strong positive audience appeal of McGruff noted among national sample respondents.

Purchases of new locks and anti-theft stickers were significantly associated with campaign exposure in the simple regressions, but the relationships did not hold with the controls in place.

Percentage Changes in Preventive Activities

Despite the strength of the above relationships, it should be kept in mind that the campaign of course did not impact all persons encountering it, or even necessarily sizable majorities. The findings may be seen in a

somewhat more "pragmatic" light by examining the net percentage changes in Table 8. The activities shown are those for which a significant campaign-related effect was found. In the first column, we report for rough baseline purposes the percentage of respondents consistently taking actions in the pre-campaign wave of interviews. In the remaining columns, the net change in frequency of activity between the first and second interviewing waves are presented, for the campaign exposed and unexposed groups. (The net change represents the percentage of respondents doing the activity more frequently at Time 2 minus the percentage doing it less frequently at Time 2.) We see, for example, that the net change in using outdoor lights between Time 1 and Time 2 for the exposed group was 29 percent, while for the unexposed group it was only nine percent. Similarly, use of timer lights "gained" in the exposed group by 18 percent, while it actually declined in the unexposed group by 13 percent, and so forth down the table. Thus we see that in most instances the actual percentages of respondents involved in these campaign-associated activity changes is quite substantial.

Prevention Competence and Crime, Crime Prevention and Communication Orientations

As might be expected, the campaign had varying impacts upon citizens depending upon their orientations toward crime per se, their pre-campaign orientations toward crime prevention, and their communicative dispositions and behavior. We shall consider each of these in turn.

Prevention Competence and Crime Orientations

The Take a Bite Out of Crime campaign appeared to have its strongest influences on prevention cognitions and attitudes among individuals feeling less threatened by crime. However, it seems to have influenced action-taking in differing ways among both more and less threatened citizens.

Campaign-related gains in prevention knowledge and confidence occurred at significant levels only among those seeing their neighborhoods as relatively safe at night (Table 9) and those calling their environs less dangerous than others. These findings suggest a somewhat counterproductive impact of the campaign in that prior to the campaign, the greater the perceived neighborhood crime threat, the lesser the levels of prevention knowledge and confidence among citizens (Table 10). Thus an "optimal" impact of the campaign would

have been in the direction of making those individuals who felt more threatened more knowledgeable and confident. However, the campaign appears to have had little influence on the prevention orientations of that group, and instead had a marked effect on those perceiving themselves as being in less crime-ridden locales.

Parallel results were found based upon the extent to which respondents saw themselves as vulnerable to burglary or violent crime (Table 11). Increases in prevention knowledge, effectiveness and confidence were found only among those seeing themselves "not at all likely" to be a victim of physical assault. Moreover, increases in prevention effectiveness and confidence were found only among those perceiving low risk of being burglarized. (Prevention knowledge, however, did gain among those reporting a high burglary risk.)

Campaign-related gains in prevention action-taking, however, were quite mixed according to citizens' crime orientations. For one thing, neighborhood observing activity (including either watching on one's own or asking others to) showed the sharpest gains among individuals with perceptions of greater neighborhood crime and perceived vulnerability (Table 9). Furthermore, neighborhood organizational activity jumped significantly among those perceiving themselves as more at risk from burglary or assault. Adding to the striking nature of these findings is the indication that prior to the campaign, more crime-threatened panel respondents were no more likely than the less threatened to engage in such cooperative efforts (Table 10).

On the basis of the evidence here, the campaign "worked" quite effectively in prompting those citizens with the greatest felt need to protect themselves from crime to "do something" in the form of the campaign-advocated cooperative measures. Those perceiving a greater crime threat were also likelier to have acquired a dog for security purposes. Police reporting rose only among lesser crime threatened respondents, but reporting appears to have been initially more frequent among high crime threat citizens, suggesting a ceiling effect. Campaign-related organization joining increased significantly among those perceiving less neighborhood danger.

Prevention Competence and Previous Prevention Orientations

We also need to consider the possibility that levels of prevention competence were increased primarily among those citizens already more prevention conscious. Citizens with more positive cognitions and attitudes regarding prevention may not necessarily take actions congruent with those orientations. Table 10 bears out this finding for the panel sample as well. Persons with higher levels of prevention knowledge, perceived effectiveness and confidence prior to the campaign were not any more likely than other citizens to take most of the prevention actions, with police reporting and to a lesser extent having neighbors watch their homes the only consistent exceptions. However, prevention knowledge, perceived effectiveness and confidence were highly correlated with each other.

One possible result of the campaign would have been to inspire greater action taking among those respondents with more positive psychological orientations, while having relatively little behavioral impact on citizens with less positive prevention orientations. This could create a greater "gap" between the already more prevention competent and those less so. However, the findings in Table 12 strongly suggest that a somewhat opposite effect occurred. Increases in prevention activities were consistently greater among those persons with lower initial levels of knowledge, perceived effectiveness and confidence. At the same time, persons with lower initial knowledge levels increased in confidence, those perceiving prevention techniques previously as less effective rose in knowledge and confidence, and those initially less confident increased in perceiving themselves as knowledgeable. Thus the campaign appears to have stimulated greater overall levels of prevention competence among those initially less, rather than more, competent.

Prevention Competence and Media Orientations

As expected, crime prevention opinion leadership prior to the campaign correlated positively and significantly with prevention knowledge and confidence, and with police reporting, neighborhood observing and organization joining (Table 13). However, opinion leaders showed evidence of their persuasability in that those subsequently exposed to the campaign registered significant gains in how effective they saw citizen prevention measures as being, and in

use of outdoor lights and in organization joining (Table 14). For many opinion leaders, the campaign may have substantiated their already existing perceptions of being knowledgeable and confident, and in addition provided them with arguments that citizen actions were more effective as well.

Contrarywise, non-opinion leaders showed substantial gains in levels of prevention knowledge and confidence, as well as in such activities as police reporting, neighborhood observing and the joining of groups. Not incidentally, these data further support a view of opinion leaders not being as necessary to information and influence dissemination processes as they may have been several decades ago (cf. Robinson, 1976; O'Keefe, 1982). In this instance, the opinion "followers" appear to be undergoing changes as a direct consequence of exposure to the campaign. The extent to which some of those changes occurred through interaction with opinion leaders as well is unknown here, but it seems clear that campaign exposure per se was at a minimum a major agent of change.

Those respondents indicating a greater need for information about crime prevention prior to the campaign appeared generally less knowledgeable and confident, although somewhat more inclined to report suspicious incidents to police and to be watchful of their streets (Table 13). The campaign appeared to benefit this group moreso than the less information curious in the sense of increasing their propensity for taking part in cooperative prevention activities, acquiring a dog, and using outdoor lights (Table 14). The campaign also appeared to raise their confidence about protecting themselves to higher levels.

On the other hand, the campaign seemed to stimulate greater cognitive and attitudinal change among those seeing themselves with lesser informational needs, along with increasing prevention activities on just two dimensions.

Respondents who attended more to crime news and television dramas proved to be higher in pre-campaign prevention knowledge, and in perceived effectiveness of citizen prevention techniques. They (Table 13) also tended to be taking most of the prevention steps under study here. For them, exposure to the McGruff campaign appears to have increased their confidence in protecting themselves (perhaps legitimizing information they had garnered from other media sources), and also strongly reinforced the range and intensity of their action-taking (Table 14).

Corroborative Findings from the National Sample

The panel data supportive of the impact of the campaign are further corroborated by these general findings from the national sample survey:

**Among those exposed to the Take a Bite Out of Crime PSAs, over a quarter said they had paid a great deal of attention to them, and three-quarters reported paying at least "some" attention. Eighty-eight percent were able to verbalize a main point of the ads, with nearly a third of those mentioning cooperation with other people to help prevent crime as a main message.

**A strong majority of those exposed perceived the ads as effectively conveying their message, and said they found the information contained in them worth passing on to other people. The reactions were consistently favorable among all population subgroups, although younger persons tended to rate the ads more positively.

**Nearly a quarter of those exposed said they had learned something new from the PSAs, and 46 percent said they had been reminded of things they'd known before but had forgotten. Younger persons and women were likelier to report having been reinforced in this way.

**Upwards of half of the respondents recalling the ads said they had made them more concerned about crime and more confident in protecting themselves. Over half said the PSAs had made them feel more responsible about preventing crime and in perceiving citizen group efforts as more effective.

**Twenty-two percent said the ads made them more fearful of being victimized, with women being likelier to report this than men.

**Nearly a fourth of the exposed sample said they had taken preventative actions due to having seen or heard the ads, including improving household security and helping their neighbors in prevention efforts. Women were likelier to have reported doing so than men.

DISCUSSION

All in all, the findings suggest that the Advertising Council's Take a Bite Out of Crime PSAs had marked and consistent influences on

citizen perceptions and attitudes regarding crime prevention, as well as on their taking of specific preventative actions.

Individuals exposed to the campaign exhibited significant increases over those not exposed in how much they thought they knew about crime prevention; how effective they thought citizen prevention efforts were; and how confident they felt about being able to protect themselves from crime. The PSAs also appeared to have a strong impact on the taking of crime prevention actions by citizens. Exposure to the campaign was significantly related to increases in six of the seven specific preventative activities most emphasized in the televised PSAs. Particularly noteworthy were campaign-related increases in neighborhood cooperative crime prevention efforts.

Taken at face value, these findings go far in refuting many of the hypotheses and assumptions concerning campaign efficacy posed in earlier decades. And, they tend to support more recently suggested views of the media having the potential for more substantial persuasive effects.

The necessarily scattershot nature of the campaign's dissemination appears to have resulted in a wide range of effects across an even wider range of people. While the impact of the key themes of the PSAs--improved home security and cooperation with neighbors and police--were clear and prevalent throughout these findings, it is also apparent that some parts of the messages hit home with some citizens but not with others. The reasons underlying such differences are doubtlessly bound up in a host of interacting personal dispositions and social and environmental considerations.

From a more theoretical viewpoint, the findings suggest several interesting things about the overall impact of the McGruff campaign. For one, there is a strong suggestion that in at least some instances behavioral change was stimulated without corresponding changes in cognitive or attitudinal orientations. Citizens seeing themselves as more threatened and more at risk increased their cooperative observing behavior, but showed no significant changes in prevention knowledge, effectiveness or competence. Nor does it

seem likely that the behavioral change came at the end of a cumulative series of previous changes in orientations. The high threat-high risk group was indeed lower in prevention knowledge, effectiveness and competence prior to the campaign, and thus they were not poised at a high attitudinal plateau "waiting" for a message or other stimulus to goad them into action-taking.

What seems more likely is that the PSAs suggested behaviors to them which seemed reasonable enough to try out, perhaps on a quite experimental basis, and perhaps even somewhat warily. (It should be kept in mind that what we are talking about here is persons who see themselves more threatened or at risk, either simply looking out for their neighbors and/or asking their neighbors to do the same, and/or actually joining with them in group efforts. These may not be, for many people, effortless tasks.) At least some of these people may see themselves in rather desperate straits regarding their personal safety, and may be willing to try just about anything. Perhaps the realistic touches in the "Gilstraps" and "Mini Marth" PSAs provided the proper cues relating to their own environments. However, they also appear to be waiting to see some results before "adopting" those cooperative behaviors with any confidence. They seemed to be trying out the actions before believing that they've learned anything, or that they feel more confident, or that they believe that citizen prevention measures are necessarily effective.

On the other hand, among the lesser threatened and at risk, the campaign appears to have done a better job of stimulating cognitive and attitudinal changes, along with some action-taking as well, most notably police reporting. The pattern here is more akin to the classic reinforcement process, in which persons with already somewhat positive orientations toward crime prevention become even more positive through exposure to the campaign, and indeed take some actions which they had not been carrying out before, or at least as extensively.

The campaign also appears to have stimulated greater overall levels of prevention competence among those initially less, rather than more, competent. The lack of increased action-taking among those more psychologically disposed to crime prevention is not immediately explainable from these data. One possible hypothesis is that they perceived themselves as already doing as much

as they thought was warranted for self-protection. This argument would be supported by the finding that those high in prevention orientations saw their neighborhoods as safer, and themselves as less prone to victimization.

It is also noteworthy that the campaign seemed to stimulate greater cognitive and attitudinal change among those seeing themselves with lesser informational needs, along with increasing prevention activities on just two dimensions. Thus we have yet another instance of mixed effects for mixed groups, although again it is possible to impose a certain logic on the pattern of findings. In this case, it seems likely that those indicating a need for information were looking for just that--some practical advice. They received a great deal of advice from the campaign advocating cooperative actions, and they put that advice to use, perhaps on an experimental basis. Attitudinal change was only partial here, and it may be another case of persons trying out the advice before committing themselves to it. Among the low information need group, in which cognitive and attitudinal levels were already high, the campaign served to reinforce or strengthen those even further, without a great deal in the way of concommitant behavioral changes taking place. While this group may have benefited from more action taking, they may have been too confident of their own position prior to the campaign, and not motivated to follow the specific information offered.

The campaign, perhaps for a variety of reasons, appeared to be transcending many of the audience-bound constraints which seem to inhibit the wider dissemination of other crime prevention information campaign efforts.

BIBLIOGRAPHY

Atkin, C.K. "Research Evidence on Mass Mediated Health Communication Campaigns." In D. Nimmo (ed.) Communication Yearbook 3. New Brunswick: International Communication Association. 1979.

Ball-Rokeach, S. and M. DeFleur. "A Dependency Model of Mass-media Effects." Communication Research Vol. 3. 1976.

Bandura, A. Social Learning Theory. Englewood Cliffs: Prentice Hall. 1977.

Campbell, D. and J. Stanley. Experimental and Quasi-Experimental Designs for Research. Chicago: Rand-McNally. 1966.

Chaffee, S.H. "The Interpersonal Context of Mass Communication." In F. Kline and P.J. Tichenor (eds.) Current Perspectives in Mass Communication Research. Beverly Hills: Sage Publications. 1972.

Cialdini, R., R. Petty and J. Cacioppo. "Attitude and Attitude Change." In M. Rosenzweig and L. Porter (eds.) Annual Review of Psychology Vol. 32. Palo Alto: Annual Reviews.

Cohen, J. and P. Cohen. Applied Multiple Regression and Correlational Analysis for the Behavioral Sciences. Hillsdale, N.J.: Erlbaum. 1975.

Cook, T. and D. Campbell. Quasi-Experimentation. Chicago: Rand-McNally. 1979.

Dembroski, T.M., T.M. Lasater, and A. Ramirez. "Communicator Similarity, Fear Arousing Communications, and Compliance with Health Care Recommendations." Journal of Applied Social Psychology, 8: 254-269. 1978.

Douglas, D.F., B.H. Westley and S.H. Chaffee. "An Information Campaign that Changed Community Attitudes." Journalism Quarterly, 47: 479-487. 1970.

Evans, R.I., R.M. Rozelle, T.M. Lasater, T.M. Dembroski, and B.P. Allen. "Fear Arousal, Persuasion, and Actual Versus Implied Behavioral Change: New Perspective Utilizing a Real-Life Dental Hygiene Program." Journal of Personality and Social Psychology, 16: 220-227. 1970.

Farquhar, J., et al. "Community Education for Cardiovascular Health." Lancet 1: 1192-95. 1977.

Graber, D.B. Crime News and the Public. New York: Praeger. 1980.

Hanneman, G.J. and W.J. McEwen. "Televised Drug Abuse Appeals: A Content Analysis." Journalism Quarterly, 50: 329-333.

Hyman, H. and P. Sheatsley. "Some Reasons Why Information Campaigns Fail." Public Opinion Quarterly, 11: 412-23. 1947.

Insko, C.A., C.A. Arkoff, and V.M. Insko. "Effects of High and Low Fear-Arousing Communicating upon Opinions toward Smoking." Journal of Experimental Social Psychology, 1: 256-66. 1965.

Janis, I.L. and S. Feshbach. "Effects of Fear Arousing Communications." Journal of Abnormal Social Psychology, 48: 78-92. 1953.

Janis, I.L. and L. Mann. "Effectiveness of Emotional Role Playing in Modifying Smoking Habits and Attitudes." Journal of Experimental Research in Personality, 1: 84-90. 1965.

Katz, E. and P.F. Lazarsfeld. Personal Influence. Chicago: University of Chicago Press. 1955.

Klapper, J. The Effects of Mass Communication. New York: Free Press. 1960.

Kline, F.G., P.V. Miller and A.S. Morrison. "Adolescents and Family Planning Information: An Exploration of Audience Needs and Media Effects." Ina J. Blumler and E. Katz (eds.) The Uses of Mass Communications. Beverly Hills: Sage. 1974.

Lavrakas, P. Factors Related to Citizen Involvement in Personal, Household and Neighborhood Anti-Crime Measures. Report submitted to U.S. Department of Justice. 1980.

Leventhal, H. "Findings and Theory in the Study of Fear Communication." In L. Berkowitz (ed.) Advances in Experimental Social Psychology Vol. 5. New York: Academic Press. 1970.

Lewis, D.A. (ed.) Reactions to Crime. Beverly Hills: Sage Publications. 1981.

Maccoby, N. and D. Solomon. "The Stanford Community Studies in Health Promotion." In R. Rice and W. Paisley (eds.) Public Communication Campaigns. Beverly Hills: Sage. 1981.

McAlister, A., et al. "Mass Communication and Community Organization for Public Health Education." American Psychologist, 35: 375-379. 1980.

McGuire, W. "The Nature of Attitudes and Attitude Change." In G. Lindsey and E. Aronson (eds.) Handbook of Social Psychology. Reading: Addison-Wesley. 1969.

McGuire, W.J. "Personality and Attitude Change: An Information-Processing Theory." In A. Greenwald, et al. (eds.) Psychological Foundations of Attitudes. New York: Academic Press. 1968.

McGuire, W.J. "Persuasion, Resistance, and Attitude Change." In I. deSola Pool et al. (eds.) Handbook of Communication. Chicago: Rand McNally. 1973.

McNamara, E.F., T. Kurth and D. Hansen. "Communication Efforts to Prevent Wildfires." In R. Rice and W. Paisley (eds.), Public Communication Campaigns. Beverly Hills: Sage. 1981.

Mendelsohn, H. "Some Reasons Why Information Campaigns Can Succeed." Public Opinion Quarterly, 37: 50-61. 1973.

Mendelsohn, H. and G.J. O'Keefe. "Social Psychological Grounding for Effective Public Communications on Behalf of Crime Prevention." Paper presented to American Psychological Association Annual Convention. Los Angeles. 1981.

O'Keefe, G.J. "Political Campaigns and Mass Communication Research." In S. Chaffee (ed.) Political Communication. Beverly Hills: Sage. 1975.

O'Keefe, G.J. and L.E. Atwood. "Communication and Election Campaigns." In D. Nimmo and K. Sanders (eds.) Handbook of Political Communication. Beverly Hills: Sage. 1981.

O'Keefe, G.J. "The Changing Context of Interpersonal Communication in Political Campaigns." In M. Burgoon (ed.) Communication Yearbook 5. New Brunswick: Transaction Books. 1982.

O'Keefe, G.J. "Taking a Bite Out of Crime: Preliminary Perspectives on the Influences of a Public Information Campaign." Paper presented to Western Communications Educators Conference, Fullerton, Calif. 1982.

O'Keefe, G.J., H. Mendelsohn, J. Liu. "The Audiences for Public Service Advertising." Paper presented to Association for Education in Journalism Annual Conference, Boston, Mass. 1980.

O'Keefe, G.J., K. Nash and J. Liu. "The Perceived Utility of Advertising." Journalism Quarterly, 58: 435-542. 1981.

O'Keefe, G.J. and K. Reid-Nash. "Fear Arousal in a Media Information Campaign." Paper presented to Midwest Association for Public Opinion Research Annual Conference. Chicago. 1982.

O'Keefe, M.T. "The Anti-Smoking Commercials: A Study of Television's Impact on Behavior." Public Opinion Quarterly, 35: 248-257. 1971.

Percy, L. and J. Rossiter. Advertising Strategy: A Communication Theory Approach. New York: Praeger. 1980.

Podolefsky, A. and F. Dubow. Strategies for Community Crime Prevention, Collective Responses to Crime in Urban America. Springfield: Charles C. Thomas. 1981.

Ray, M. "Marketing Communication and the Hierarchy of Effects." In P. Clark (ed.) New Models for Mass Communication Research. Beverly Hills: Sage. 1973.

Rice, R.E. and W.J. Paisley (eds.) Public Communication Campaigns. Beverly Hills: Sage. 1981.

Robinson, J.P. "Interpersonal Influence in Election Campaigns: Two Step Flow Hypotheses." Public Opinion Quarterly, 40: 304-319. 1976.

Rogers, E. The Diffusion of Innovations. New York: Free Press. 1983.

Rogers, E. "Mass Media and Interpersonal Communication." In I. deSola Pool and W. Schramm (eds.) Handbook of Communication. Chicago: Rand McNally. 1973.

Salcedo, R.N., H. Read, J.F. Evans and A.E. Kong. "A Successful Information Campaign on Pesticides." Journalism Quarterly, 51: 91-95. 1974.

Schmeling, D.G. and C.E. Wotring. "Making Anti-Drug-Abuse Advertising Work." Journal of Advertising Research, 20: 33-37. 1980.

Schmeling, D.G. and C.E. Wotring. "Agenda-Setting Effects of Drug Abuse Public Service Ads." Journalism Quarterly, 53: 743-746.

Skogan, W.G. and M.E. Maxfield. Coping with Crime. Beverly Hills: Sage. 1981.

Solomon, D. "Social Marketing and Health Promotion." In R. Rice and W. Paisley (eds.) Public Communication Campaigns. Beverly Hills: Sage. 1981.

Star, S. and H. Hughes. "A Report on an Educational Campaign: The Cincinnati Plan for the United Nations." American Journal of Sociology, 55: 389-400. 1950.

Stinchcombe, A.L., R. Adams, C.A. Heimer, K.L. Scheppele, T.W. Smith, and D.G. Taylor. Crime and Punishment--Changing Attitudes in America. San Francisco: Jossey-Bass. 1980.

Tichenor, P.J., G.A. Donohue, C.N. Olien. Community Conflict and the Press. Beverly Hills: Sage. 1980.

TABLE 1

REGRESSION ANALYSES OF PREVENTION COMPETENCE

BY CAMPAIGN EXPOSURE AND CONTROL VARIABLES (n=426)

Simple Regression	Prevention Knowledge	Prevention Responsibility	Prevention Effectiveness	Prevention Concern	Prevention Confidence
Campaign Exposure (T1 control only)	.09*	-.02	.07*	.01	.12***
Hierarchical Regression					
(Block 1)					
T1 variable	.25**	.14**	.18**	.30**	.25**
(Block 2)					
Education	.08	.03	-.01	-.05	.02
Age	-.01	-.03	.13**	.02	-.16**
Income	.01	.06	.05	-.03	.03
Sex	.08*	.03	-.01	.02	.15**
Neighborhood Type	.01	-.04	.03	.15**	.02
(Block 3)					
Victimization Experience	.03	-.05	-.01	.04	.00
Media Crime Attention	.06	-.03	.12**	.11**	.05
Other Campaign Exposure	.10*	.00	.04	.05	.06
(Block 4)					
Campaign Exposure	.08*	-.03	.08*	.02	.08*
(R^2)	(.08)	(.01)	(.05)	(.10)	(.14)

*.05 (one-tailed)
**.01 (one-tailed)

TABLE 2

REGRESSION ANALYSES OF CITIZEN CRIME ORIENTATIONS

BY CAMPAIGN EXPOSURE AND CONTROL VARIABLES (n=426)

Simple Regression	Crime Rate	Night Neighbor-hood Safety	Compar. Neighbor-hood Danger	Burglary Probability	Violence Probability
Campaign Exposure (T1 control only)	-.04	.01	.03	-.05	.10**
Hierarchical Regression					
(Block 1)					
T1 variable	.26**	.45**	.29**	.33**	.19**
(Block 2)					
Education	.03	-.09	.01	-.04	-.07
Age	.05	.13**	-.02	-.02	.00
Income	-.01	-.12**	-.12**	.06	.02
Sex	-.06	-.19**	-.07*	.01	.01
Neighborhood Type	.04	.02	-.08*	.04	-.04
(Block 3)					
Victimization Experience	.07	-.01	-.05	-.02	-.11**
Media Crime Attention	.07	.08*	.08*	.15**	.12**
Other Campaign Exposure	.04	.06	-.03	.05	.06
(Block 4)					
Campaign Exposure	-.05	.02	.00	-.08*	.07
(R^2)	(.06)	(.38)	(.14)	(.13)	(.07)

TABLE 3

REGRESSION ANALYSES OF TARGET HARDENING AND DETERRENCE BEHAVIORS

BY CAMPAIGN EXPOSURE AND CONTROL VARIABLES (n=426)

Simple Regression	Lock Doors When Out	Lock Doors When In	Indoor Lights On	Outdoor Lights On	Timer Lights
Campaign Exposure (T1 control only)	.02	-.01	-.00	.12**	.07*
Hierarchical Regression					
(Block 1)					
T1 variable	.28**	.30**	.31**	.28**	.35**
(Block 2)					
Education	-.03	-.12**	-.06	-.05	.02
Age	.01	.10*	-.02	.03	.06
Income	-.02	.07	.04	.06	.12**
Sex	.05	-.18**	-.04	-.08*	-.05
Neighborhood Type	.09*	.02	.01	.06	.08*
(Block 3)					
Victimization Experience	-.03	-.03	-.07	-.02	.00
Media Crime Attention	.07*	.00	-.00	.01	-.01
Other Campaign Exposure	.05	-.03	.03	-.04	-.01
(Block 4)					
Campaign Exposure	.02	.01	-.02	.12**	.09*
(R^2)	(.08)	(.15)	(.08)	(.08)	(.17)

TABLE 4

REGRESSION ANALYSES OF SURVEILLANCE AND PERSONAL PRECAUTION BEHAVIORS

BY CAMPAIGN EXPOSURE AND CONTROL VARIABLES (n=426)

Simple Regression	Police Check	Stop Deliveries	Neighbor to Watch	Go Out/ Someone	Go Out By Car	Take Device	Avoid Places
Campaign Exposure (T1 control only)	-.03	.05	.08*	-.04	.03	.01	-.00
Hierarchical Regression							
(Block 1)							
T1 variable	.33**	.12**	.13**	.25**	.25**	.25**	.25**
(Block 2)							
Education	-.04	.03	-.06	-.08*	-.02	-.04	-.10*
Age	-.07	-.03	-.00	.12**	.05	-.04	-.02
Income	.15**	.08*	.17**	-.01	-.05	-.05	-.09*
Sex	.01	-.07	-.07	-.29**	-.28**	-.12**	-.13**
Neighborhood Type	-.05	-.03	.02	-.05	-.07	.08	.02
(Block 3)							
Victimization Experience	.05	.01	.10**	.03	.04	.02	.03
Media Crime Attention	.05	.01	-.06	.08*	.10**	.07	.08*
Other Campaign Exposure	.04	.10*	.04	.05	.08*	.09**	.12**
(Block 4)							
Campaign Exposure	-.05	.03	.10*	-.04	.00	-.01	-.03
(R^2)	(.12)	(.03)	(.05)	(.25)	(.22)	(.08)	(.13)

TABLE 5

REGRESSION ANALYSES OF COOPERATIVE BEHAVIORS

BY CAMPAIGN EXPOSURE AND CONTROL VARIABLES (n=426)

Simple Regression	Neighborhood Observing	Police Reporting	Organization Joining
Campaign Exposure (T1 control only)	.11**	.13**	.09**
Hierarchical Regression			
(Block 1)			
T1 variable	.19**	.20**	.31**
(Block 2)			
Education	-.08	-.02	.08*
Age	.04	-.15**	.02
Income	.15**	.09*	.06
Sex	-.02	.01	-.14**
Neighborhood Type	-.04	-.02	-.01
(Block 3)			
Victimization Experience	.04	.22**	.07*
Media Crime Attention	.04	.01	-.03
Other Campaign Exposure	.14**	.10**	.11**
(Block 4)			
Campaign Exposure	.12**	.08*	.09*
(R^2)	(.08)	(.13)	(.13)

TABLE 6

REGRESSION ANALYSES OF TARGET HARDENING AND DETERRENCE PURCHASES

BY CAMPAIGN EXPOSURE AND CONTROL VARIABLES (n=426)

Simple Regression	Security Check	New Locks	Burglar Alarm	Outdoor Lights	Anti-theft Stickers	Dog for Security
Campaign Exposure (T1 control only)	-.01	.08*	-.03	-.05	.06*	.08**
Hierarchical Regression						
(Block 1)						
T1 variable	.17**	.35**	.34**	.20**	.46**	.56**
(Block 2)						
Education	-.05	.03	-.16**	-.06	-.03	-.09*
Age	.11*	-.08*	-.03	.02	.01	-.12**
Income	.01	.09*	.04	.07	.09	.07*
Sex	.01	.02	-.01	.06	-.01	-.02
Neighborhood Type	.05	.01	.07	.01	-.08*	.07*
(Block 3)						
Victimization Experience	.06	.01	.04	-.01	-.01	-.01
Media Crime Attention	.02	.12**	.03	.02	.01	-.04
Other Campaign Exposure	.07	.05	.04	-.06	.02	.01
(Block 4)						
Campaign Exposure	.02	.04	-.03	-.04	.06	.06*
(R^2)	(.03)	(.15)	(.12)	(.03)		

TABLE 7

REGRESSION ANALYSES OF LOSS REDUCTION AND PERSONAL PRECAUTION PURCHASES BY CAMPAIGN EXPOSURE AND CONTROL VARIABLES (n=426)

Simple Regression	Property ID	Theft Insurance	Peephole In Door	Protective Devices
Campaign Exposure (T1 control only)	.04	.04	.04	-.00
Hierarchical Regression				
(Block 1)				
T1 variable	.39**	.33**	.33**	.44**
(Block 2)				
Education	.06	.02	-.02	-.14**
Age	-.03	.01	-.01	-.16**
Income	.07	.12**	.07	.10**
Sex	.08*	.07	-.01	.09*
Neighborhood Type	.02	.05	-.03	.08*
(Block 3)				
Victimization Experience	.01	.02	.10**	.04
Media Crime Attention	.01	.03	-.01	.05
Other Campaign Exposure	-.00	.08*	.07	.06
(Block 4)				
Campaign Exposure	.03	.04	.04	-.03
(R^2)	(.16)	(.16)	(.11)	(.28)

TABLE 8

NET PERCENTAGE CHANGES IN KEY PREVENTATIVE ACTIVITIES BY EXPOSED AND UNEXPOSED GROUPS

	Percent "Always" or "Yes" Time 1	Percent[1] Net Change: Exposed Group	Percent[1] Net Change Unexposed Group
Outdoor Lights	41%	+29%	+9%
Timer Lights	30%	+18%	-13%
Neighbor Watch	62%	+26%	+11%
Neighborhood Observing	82%	+4%	-1%
Police Reporting	33%	+5%	-5%
Organization Joining	13%	+10%	+1%
Dog for Security	42%	+19%	+11%
	(n=426)	(n=204)	(n=222)

[1]Figures represent net percentages of respondents in each group changing in the frequency with which they carried out each activity. (In the case of "Dog for Security," the net percentage changing dog ownership status is represented.)

TABLE 9

REGRESSION BETA VALUES FOR KEY CHANGE VARIABLES BY CAMPAIGN EXPOSURE BY PERCEIVED NEIGHBORHOOD CRIME
(n=426)

	NEIGHBORHOOD SAFETY		CRIME DANGER	
	Reasonably or Very Safe (n = 306)	Somewhat or Very Dangerous (n = 118)	Less or Much Less Dangerous (n = 268)	Average or Much More Dangerous (n = 153)
Orientations				
Prevention Knowledge	.08*	.12	.11*	.04
Prevention Effectiveness	.07	.05	.08	.06
Prevention Confidence	.12**	.09	.17**	.02
Activities				
Outdoor Lights	.12**	.11	.09*	.15**
Timer Lights	.08*	.07	.07	.11
Dog for Security	.06	.13*	.01	.18**
Police Reporting	.16**	.05	.17**	.08
Neighbor to Watch	-.02	.31**	.04	.14*
Neighborhood Observing	.06	.24**	.06	.20**
Organization Joining	.10*	.07	.10*	.07

TABLE 10

CRIME ORIENTATIONS BY PREVENTION ORIENTATIONS: TIME 1 CORRELATIONS
(n = 426)

	Neighborhood Safety	Crime Danger	Probability of Burglary	Probability of Violence	Prevention Knowledge	Prevention Effectiveness	Prevention Confidence
Orientations							
Prevention Knowledge	-.12[b]	-.07	-.10[a]	-.16[c]	--	.27[c]	.41[c]
Prevention Effectiveness	-.02	-.07	-.04	-.09[a]	.27[c]	--	.30[c]
Prevention Confidence	-.29[c]	-.15[c]	-.08	-.15[c]	.41[c]	.30[c]	--
Activities							
Outdoor Lights	-.01	-.04	.04	.03	.07	.09[a]	.07
Timer Lights	.14[b]	.00	.09[a]	.07	.02	.03	-.05
Dog for Security	-.13[b]	-.05	.05	-.00	.02	.08	.07
Police Reporting	.01	.14[b]	.12[b]	.11[a]	.15[c]	.13[c]	.14[c]
Neighbor to Watch	.07	-.05	.03	-.02	.13[b]	.12[b]	.04
Neighborhood Observing	.07	.04	.02	.08[a]	.02	.08	-.04
Organization Joining	.01	.05	-.05	.01	.09[a]	.02	-.01

[a] $p < .05$

[b] $p < .01$

[c] $p < .001$

TABLE 11

REGRESSION BETA VALUES FOR KEY CHANGE VARIABLES BY CAMPAIGN EXPOSURE BY VICTIMIZATION PROBABILITY
(n = 426)

	BURGLARY		VIOLENCE	
	Not Very Likely (n = 251)	Somewhat or Very Likely (n = 158)	Not Very Likely (n = 256)	Somewhat or Very Likely (n = 145)
Orientations				
Prevention Knowledge	.07	.14*	.15**	.01
Prevention Effectiveness	.12*	-.03	.16**	-.10
Prevention Confidence	.18**	.02	.12**	.10
Activities				
Outdoor Lights	.11*	.09	.11*	.10
Timer Lights	.03	.12*	.05	.10
Dog for Security	.11**	.02	.05	.13*
Police Reporting	.19**	.07	.18**	.10
Neighbor to Watch	.03	.17**	.04	.15*
Neighborhood Observing	.11*	.16**	.05	.22**
Organization Joining	.07	.12*	.02	.22**

TABLE 12

REGRESSION BETA VALUES FOR KEY CHANGE VARIABLES BY CAMPAIGN EXPOSURE BY PREVENTION ORIENTATIONS
(n = 426)

	EFFECTIVENESS		KNOWLEDGE		CONFIDENCE	
	Har t All Somewhat (n = 253)	A Great Deal (n = 165)	Don't Know Much, Know Some Things (n = 336)	Know a Great Deal (n = 88)	Not Very, Somewhat Confident (n = 294)	Very Confident (n = 121)
Orientations						
Prevention Knowledge	.12*	.06	--	--	.10*	.13*
Prevention Effectiveness	--	--	.07	.05	.07	.09
Prevention Confidence	.09*	.17**	.10*	.23**	--	--
Activities						
Outdoor Lights	.12*	.07	.10*	.17*	.08	.17**
Timer Lights	.13**	-.05	.10**	-.01	.06	.09
Dog for Security	.10*	.07	.06	.21**	.09*	.06
Police Reporting	.17**	.09	.14**	.10	.15**	.08
Neighbor to Watch	.14**	-.00	.09*	.03	.14**	-.09
Neighborhood Observing	.18**	.05	.14**	.01	.13**	.02
Organization Joining	.07	.10*	.09*	.10	.09*	.11

TABLE 13

INFORMATION ORIENTATIONS BY PREVENTION ORIENTATIONS: TIME 1 CORRELATIONS
(n = 426)

	Opinion Leadership	Information Need	Media Crime Attention
Orientations			
Prevention Knowledge	.11[b]	-.13[b]	.09[b]
Prevention Effectiveness	.06	-.03	.10[b]
Prevention Confidence	.14[c]	-.15[c]	.02
Activities			
Outdoor Lights	-.05	-.02	-.01
Timer Lights	-.00	.07	.08[a]
Dog for Security	-.09[a]	-.06	.02
Police Reporting	.09[a]	.13[b]	.12[b]
Neighbor to Watch	-.04	-.03	.07
Neighborhood Observing	.08[a]	.14[c]	.11[b]
Organization Joining	.08[a]	-.03	.11[a]

TABLE 14

REGRESSION BETA VALUES FOR KEY CHANGE VARIABLES BY CAMPAIGN EXPOSURE BY COMMUNICATION ORIENTATIONS

	OPINION LEADERSHIP		INFORMATION NEED		MEDIA CRIME ATTENTION	
	Not More Likely to Be Asked Advice (n=320)	More Likely to Be Asked Advice (n=78)	Hardly Any Need (n=193)	Some or Great Need (n=231)	Low Attention (n=214)	High Attention (n=212)
Orientations						
Prevention Knowledge	.08*	.13	.11*	.06	.11*	.05
Prevention Effectiveness	-.00	.31**	.12*	.05	.05	.08
Prevention Confidence	.13**	.10	.15**	.12**	.05	.20**
Activities						
Outdoor Lights	.07	.24**	.03	.18**	.07	.16**
Timer Lights	.07	.09	.09	.06	.04	.11*
Dog for Security	.10**	.03	.07	.08*	.03	.11**
Police Reporting	.17**	-.02	.23**	.06	.10*	.18**
Neighbor to Watch	.07	.11	-.01	.18**	.05	.11*
Neighborhood Observing	.11**	.04	.10*	.13**	.11*	.09
Organization Joining	.09*	.22*	.07	.10*	.14**	.05