PREVENTING DOMESTIC VIOLENCE IN THE AFRICAN AMERICAN COMMUNITY: THE IMPACT OF A DRAMATIC RADIO SERIAL

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Paper submitted to the Health Communication Division

50th International Communication Association Annual Conference

May 2000

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Abstract

The paper reports on the evaluation of "It's Your Business," a dramatic radio serial promoting domestic violence prevention in the African American community. Despite commitments from radio stations in four study sites, the series was played for the requested 12 weeks in only one city. Consequently, only cross-sectional data from one city could be used to assess impact. Only nine percent of the sample could confidently be called exposed, answering a recall question correctly and claiming to hear more than five episodes. These moderately exposed respondents scored higher than non-exposed respondents on 21 out of 27 anti-domestic violence beliefs and behaviors; ten differences were statistically significant. However, for only two out of the 27 outcomes did the moderate exposure group display stronger outcomes than a group who claimed exposure but could not recall much about the program at a statistically significant level. We conclude that the association of moderate exposure and anti-domestic violence outcomes was most likely an artifact of selective perception, and not a result of impact. The negative result is attributed to the low levels of exposure, not that the series could not work at a higher level of exposure. The evaluation points to the need to better understand how exposure can be achieved to complement our work on developing messages.

1. Introduction

Concern with violence and crimes of passion has reached historic levels in the United States in response to a number of widely reported stories in the news involving youngsters in schools, over committed investors, and hate-filled racists (Newsweek, August 23, 1999; New York Times, May 29, 1999; Time, August 9, 1999]. Yet, in the United States, violent crimes are more often committed within families than among strangers (Straus and Gelles, 1990). Evidence suggests that family members or acquaintances commit nearly half (47%) of all homicides (Alpert, Cohen and Sege, 1997). Among experts, domestic violence is considered one of the most insidious and pervasive forms of violence in America today. Defined as intentional violent or controlling behavior by a person in an intimate relation with the victim (Alpert, Cohen and Sege, 1997), adult intimate-partner violence has been documented in every race, religion, class and level of education (Straus and Gelles, 1986).

The prevalence of domestic violence is difficult to estimate due to the covert nature of the behavior, as well as the norms that tolerate abuse. Published surveys suggest a wide range, with estimates of between one and four million American women suffering from intimate partner abuse each year (Alpert, Cohen and Sege, 1997). A national survey suggests that one in four (26%) American women of all races and classes has at some time been a victim of domestic abuse (Lieberman Research, 1996). Scant information about the prevalence of domestic violence in the African American community is available. One survey estimated that sixteen percent of African American women has been physically abused by a husband or partner within the last five years (Falik and Collins, 1996). Another study found that black women were the victims in more than half (53%) of the violent deaths occurring in the homes of female victims (Bailey, Kellerman, Somes, Banton, Rivara and Rushforth, 1997).

In recent years, the problem of violence has been recast from the legal to the public health domain (Cole and Flanagin, 1998, 1999). By setting violence prevention as a public health priority, national and international health agencies have signaled this shift, including the Centers for Disease Control and Prevention (Foege, Rosenberg and Mercy, 1995), the World Health Organization (World Health Assembly, 1996) and the American Medical Association (Marwick, 1998). This critical shift in perspective transforms the research we conduct to better understand the problem (Rosenberg, Fenley, Johnson and Short, 1997; Wallace and Wallace, 1998), and changes the character of the solutions that are proposed to address it (American College of Physicians, 1998; Morbidity and Mortality Weekly Report, 1997).

Recent large-scale initiatives build on earlier efforts by the domestic violence prevention community to offer shelter and services to victims, as well as to influence how courts, enforcement agencies, and other policy actors respond to incidents of abuse (Rosenberg, et al., 1997). This emerging perspective adopts an analytical approach informed by public health models that emphasizes the social and cultural contexts of abuse, and highlights prevention in addition to treatment (Cole and Flanagin, 1998). Among other approaches, such as mandatory alternative treatment for batterers, and professional training for service providers who come into contact with victims, this perspective is increasingly reflected in communication interventions that are designed to change beliefs, norms and social practices related to abuse (Rosenberg, et al., 1997). The public health model also highlights the role of evaluation in testing the effectiveness of new and alternative interventions (Rosenberg, et al., 1997).

Proponents for domestic violence prevention activities suggest that above and beyond the important efforts to influence the behavior of abusers and victims, successful interventions must also address the social norms, beliefs and practices related to domestic violence in the individuals living around and interacting with those directly involved in abuse. Both advocates and researchers argue that transforming social norms from those of silence and toleration to intervention and condemnation is essential to the long-term reduction of domestic violence (Klein, Campbell, Soler and Ghez, 1997; Rosenberg et al., 1997). It is in the light of this argument that a radio-based intervention called "It's Your Business" was designed. This article describes its evaluation.

2. Background

2.1. The origins of "It's Your Business"

The "It's Your Business" campaign built upon previous efforts by the Family Violence Prevention Fund (Fund). This San Francisco-based agency founded in 1980 works to improve the health, judicial, law enforcement and public policy responses to domestic violence. In recent years the Fund has developed a series of media campaigns and community-mobilization efforts to promote community action and prevention of domestic abuse (Klein et al., 1997)¹. Among other achievements, the Fund developed a nationally broadcast series of television spots entitled "There's no excuse for domestic violence" in collaboration with the Advertising Council. Focus group discussions held in relation to this campaign suggested that a culturally specific initiative might be more effective than a general campaign on domestic violence in reaching the African American community. With the sponsorship of the Advertising Council, a group of freelance scriptwriters with experience in writing dramatic materials for an African-

¹ The website for the Fund (www.fvpf.org) describes their mission and current activities.

American audience, and the Uniworld Group, Inc., the nation's largest African American marketing communications agency, a sophisticated radio campaign was developed.

Unlike traditional public service announcements, the Fund pursued the development of a social drama, an innovative approach that had been used extensively outside the United States (Advocates for Youth, 1998; Nariman, 1993). These programs use entertaining formats such as the soap opera to deliver social messages. The success of these interventions has caught the attention of behavioral researchers and public health programs in developing countries over the past two decades (Maibach and Holtgrave, 1995; Montgomery, 1990).

Sporadic public health messages have been included in television programs in the US (Montgomery, 1990). To the best of our knowledge, no dramatic series distributed at the national level has been dedicated to the delivery of a specific health message. The cost of media production and the value of broadcast time in comparison with those in developing countries may be one explanation for the lack of experimentation in the United States (Advocates for Youth, 1998). The "It's Your Business" campaign developed a series of twelve long-form (ninety-second) public service announcements for radio. While each episode in the series offered a specific educational message linked to the overall campaign theme, the series was built around a dramatic story line designed to capture listener interest and involvement with the characters and their circumstances. Such involvement was believed to be critical to the impact of the campaign (Bandura, 1986; Hoffner, 1996; Rubin and Perse, 1988; Slater and Rouner, 1997).

The characters, relationships, interactions and outcomes dramatized throughout the series were selected on the basis of assumptions about the relations between attitudes and behaviors that might be affected by exposure to, and involvement with the series. These assumptions were based on the existing literature about domestic violence, related investigations, and specific pre-test surveys. Included in the conceptual framework were beliefs about becoming involved and taking actions with regard to domestic violence. These beliefs included costs and benefits, or consequences of action and inaction in the face of knowledge or suspicion regarding domestic violence. They also included assessments of social norms, and perceived self-efficacy with regard to the primary goal of the project, increasing public willingness to talk about domestic violence and specifically to offer support to women thought to be victims of abuse. Evidence from research over the years has suggested that these types of beliefs serve as prominent cognitive determinants and facilitators of a number of health behaviors (Bandura, 1986; Fishbein, Bandura, Triandis, Kanfer, Becker, and Middlestadt, 1991; Fishbein and Middlestadt, 1995.).

The series featured a central character, Ma Bea, who was the host of a community affairs radio call-in show that began each of the twelve campaign segments. At the beginning of each episode Ma Bea would provide an "update" about a local domestic violence trial. This update served as a framing device that would allow other "characters" in Ma Bea's fictional audience to discuss, and thereby reinforce the relevant lesson of that particular episode from the perspectives of their own lives. Different episodes promoted specific elements of the overall theme. The first episode encouraged listeners to speak out about domestic violence, to "air their dirty laundry," true to the campaign theme-- "It is your business." Other episodes modeled characters offering help to a victim and providing information about where to seek help. Within this fictional audience, a set of recurring characters made up an extended family that struggled over the course of the series to convince a young woman in the family to leave her abusive husband. Each episode concluded with an 800 number where listeners could call for information about how to get involved in their communities.

The program was made available to a wide range of radio stations across the country through the American Urban Radio Network. In some sites, particularly in the four cities where the evaluation was undertaken, a special effort was undertaken to encourage local stations to broadcast the series.

2.2. Evaluation design

The evaluation was designed to determine the effectiveness of the "It's Your Business" radio campaign in achieving several cognitive and behavioral goals. At one level, the evaluation was concerned with determining the impact of the campaign within the population of experimental cities, in comparison to control cities. Cities were selected as potential sites for evaluation based on two criteria:1) having a substantial African American population, and 2) having a single radio station that attracted a large proportion of the African American listening audience. Four cities that matched these criteria were chosen for the study -- Charlotte, North Carolina; Dayton, Ohio; Kansas City, Missouri; and Louisville, Kentucky.

The design involved measurement by telephone survey at five times during the project period:

O1 O3 O5 X5 O6 X8 O8

In the above schematic, O signifies measurement wave, with the subscript indicating the month of activity; X5 signifies the beginning of the radio series, and X8 the end of the series, three months later; O1, O3 and O5 indicate three pre-broadcast surveys; O6 a mid-broadcast survey; and O8 an immediate post-broadcast survey.

Successive cross-sectional samples were drawn. A random digit dial sample was purchased from Survey Sampling, Inc. focusing on specific telephone exchanges where the likelihood was greater than 60% that an answering respondent would be African American. Telephone interviews were undertaken by the DataStat survey company of Ann Arbor, Michigan. All chosen households were contacted at least ?? times. Respondents were screened to ensure inclusion of only those respondents who identified themselves as African American and as regular listeners to the radio stations slated to broadcast the program. Thus the sampling strategy was designed to maximize the likelihood of finding people who had access to the series. A power analysis suggested the need for surveying approximately 600 respondents per wave before the broadcast (150 per city), and 900 respondents during and after the broadcast (225 per city). The duration of the completed pre-broadcast telephone interview was approximately 15 minutes; the post-broadcast interview was about three minutes longer. The pre-broadcast instrument included measures of demographics, experience with domestic violence, racial identification, media use, and a series of measures designed to capture beliefs, attitudes, intentions and behaviors related to the goals of the campaign. Exposure measures included a general item which was asked in the pre-broadcast surveys to assess the level of false positives, the tendency to recall exposure to the program even before it was broadcast, and further questions were added for the mid- and post-broadcast survey waves.

2.3 Plan of analysis

The preliminary design supported two analytical approaches: longitudinal and cross-sectional.

The longitudinal analysis would ask whether or not there was an effect on the population: it examined what level of exposure was achieved and whether the overall population changed on the outcomes as a result of the campaign. As indicated by the design schematic above, the longitudinal analysis was intended to have four replications (one in each of the test cities), with comparisons focusing on differences within each city between pre-, mid- and post-broadcast measures. As in all longitudinal field experiments, confidence in a causal interpretation would be threatened by occurrence of an unplanned, but relevant event in any city (Cook and Campbell, 1979), but the inclusion of four different cities was expected to make such an event an unlikely explanation for any observed effects replicated in each site.

The cross-sectional component was designed to provide a post-hoc dose response analysis to complement the longitudinal analysis, and would examine the association between reported exposure and attitudinal and behavioral outcome measures at the post-broadcast wave only. A causal inference would be contingent on observing a statistically significant and substantial association between exposure to the program, and higher levels of targeted attitudes and behaviors, after possible confounders were statistically controlled. Confidence in this inference depends upon confidence in our measures of exposure as well as in self-report measures of attitudinal and behavioral response.

While this original research design would have allowed for fairly strong inferences about the nature of effects of the "It's Your Business" campaign, it could not ultimately be applied because there were many difficulties associated with achieving adequate broadcast exposure to the series. Ultimately, the analyses actually performed reflect the influence of a number of unplanned events.

Communication professionals acknowledge that interventions that are dependent upon the good will of broadcasters are always at high risk and some argue for the need to pay for airtime (Advocates for Youth, 1998; Cosper, 1997).² The "It's Your Business" campaign was at a particularly high level of risk because: 1) it represented an unusual approach to public service advertising; and 2) it required an unusual commitment of valuable time (90 second spots, 12 different segments, each to run a single week, over 12 weeks.).

Despite commitments from stations in each of the selected cities, no station actually presented the campaign as originally agreed. In one city, the series received little airplay at all. In two other cities, the stations played the series over the course of 12 days rather than 12 weeks. In only one city was the series played for the requested 12 weeks. Even in this city, the series was shifted mid-way to a sister station due to an unanticipated shift in program formats. The result was a dramatic reduction in the levels of exposure that were possible. And, given the design of the series as an integrated serial drama, with a cumulative impact based upon involvement with the story and its characters, maximal impact could not be expected.

Given that three of the four test cities did not fully air the "It's Your Business" series, we could not execute our original plan of analysis, which would have included comparisons across all four cities, both over time and post-campaign only. However, the lack of sufficient exposure across the test cities in airing the campaign answers one of our original evaluation questions: there was no general impact of the campaign on the populations across the four cities.

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² At the same time, the Advertising Council (1999) reported a 25% increase from 1997 to 1998 in donated radio time for their campaigns, to a total of over \$700 million. Radio alone made up almost 60% of total media support to the

The only other question we could ask is about the one city that did manage to air the series in its entirety, Louisville. Was there evidence, there, that the campaign produced changes in beliefs, attitudes, norms, or behavior with respect to domestic violence? Thus, our original plan of analysis was modified to include both longitudinal and cross-sectional comparisons for Louisville only, to assess both population and individual level changes within this city. In Louisville, 385 respondents were surveyed before the broadcast, and 698 afterwards (we were able to supplement the planned Louisville 'after' sample, since we were aware of the failure to fully broadcast the program in the other cities). The analyses that follow were conducted using only data from this city.

3. Results

Looking at the data for Louisville, the first research question was as follows:

Research Question 1: Was the Louisville population as a whole affected by the "It's Your Business" Campaign?

In order to detect changes in the outcome variables of interest in the Louisville population from pre- to post-campaign, it would be necessary for a substantial proportion of the target audience to have been exposed to the series. Thus, a preliminary question to ask is whether or not the reach and frequency of "It's Your Business" was large enough that we might expect to detect changes at the population level, if exposure was effective?

3.1 Exposure Measures

In addition to a general exposure question asked both pre- and post- broadcast,³ respondents surveyed post-broadcast were given a second chance to report exposure to the campaign with a more prompted version of the question.⁴ Anyone who reported exposure based on either of these questions were then asked to recall what the series was about⁵, how many times each segment was heard, and how many different episodes were heard.

Advertising Council totaling \$1.2billion in 1998 alone.

³ "In the PAST MONTH, did you hear any dramatic advertisements against domestic violence featuring the character Ma Bea?"

⁴ "In the PAST MONTH, did you hear a series of radio advertisements on that told the story of a domestic violence situation? In the series, CHARLISE is the name of the victim and JAMES is the abuser; the tagline and theme were IT'S YOUR BUSINESS; and the advertisements took the form of a series, like a soap opera?"

⁵ I am going to read 3 short descriptions of what the series featuring Ma Bea was about. Can you tell me which one of them best describes what happens on the series? Was it MOSTLY about...

An examination of pre-broadcast exposures revealed a substantial number of false positives, or claimed exposure to "any dramatic advertisements against domestic violence featuring the character Ma Bea on Station --" before the series actually aired: nearly 16% of the respondents made such claims. While significantly more respondents, 22%, claimed exposure after the campaign aired ($X^2 = 5.87$, p < .05), we were reluctant to rely upon this somewhat faulty measure as the primary basis for claims of the campaign's impact.

Thus, we constructed a more refined measure of campaign exposure based on all of the exposure measures, but which was only applicable to those who were interviewed post-broadcast. To try to distinguish individuals who *claimed* exposure from those who we could be more confident were exposed to the series, we constructed a more stringent measure of respondents' exposure, based on three conditions, all of which needed to be satisfied for a respondent to have qualified as exposed to the series (See Table 1). A respondent was categorized as exposed if s/he 1) reported hearing the campaign generally; 2) answered a multiple choice question about the plot of the series correctly; 3) reported hearing an episode at least 3 times OR reported hearing at least 3 different episodes. Individuals who reported exposure to the campaign, but could not correctly identify what the series was about, OR did not report hearing at least 3 different episodes, OR did not report hearing one episode at least 3 times were classified as ambiguously exposed. Individuals who did not claim to have heard any dramatic advertisements against domestic violence were classified as not exposed to the campaign.

Table 1: Distribution of variables used in refined exposure measure

Question	Values	%	N
In the PAST MONTH, did you hear any dramatic advertisements against domestic violence	No	77.8%	527
featuring the character Ma Bea?	Yes	22.2%	150
Asked only of those who said "No" above			
In the PAST MONTH, did you hear a series of radio advertisements on that told the story			
of a domestic violence situation? In the series, CHARLISE is the name of the victim and	No	83.7%	448
JAMES is the abuser; the tagline and theme were IT'S YOUR BUSINESS; and the	Yes	16.3%	86
advertisements took the form of a series, like a soap opera?"			
Asked only of those who said "Yes" to either question above			
I am going to read 3 short descriptions of what the series featuring Ma Bea was about. Can you	tell me		
which one of them best describes what happens on the series? Was it MOSTLY about			
A man who had been in prison and returned home and the problems he and his wife faced (OR)	1?	14.4%	34
2. How people in a family and community reacted to protect a woman from beating by her husband? (OR)		52.5%	124
3. A young child who had to tell a teacher in school the problems between her mother and her mother's boyfriend? (OR)		18.2%	43
None/Other/DK		14.8%	35
The advertisements took the form of a series, like a soap opera. About how many different	1-2	73.0%	157
episodes of the series did you hear?	3-5	23.3%	50
	6-9	3.3%	7
	13+	.5%	1
About how many times did you hear each episode?	1	39.0%	87
	2	31.4%	70
	3-4	19.3%	43
	5+	10.3%	23
Refined exposure measure			
Includes either general exposure measure, story check, and how many different episodes.			
"not exposed" = "No" to either general exposure measure			
"exposed" = "yes" to either general exposure, "2" to story check, and ">=3" to # different			
episodes or ">=2" to # times heard episode			
Not Exposed		68.5%	455
Exposed		9.2%	61
Ambiguous (Not Included)		22.3%	148

Exposure to the campaign was extremely limited. By the criteria mentioned above, only 9.2% of the 'after' sample could be classified as being exposed to the campaign. It seems clear that the series did not reach its audience as intended, with few individuals hearing many episodes of "It's Your Business" on more than one occasion. Barely 1% of respondents in Louisville reported hearing even half (6) of the episodes. Only 61 individuals out of 698 surveyed could describe what the series was about, and claimed to have heard an episode more than twice, or to have heard more than two episodes. This means that there is a strong first conclusion: even in Louisville, "It's Your Business" was not able to reach its audience, except marginally. With such a small proportion of the total target audience being exposed to the campaign beyond superficial levels, it is unrealistic to assume that the campaign could have had an impact on the population, or that these effects could be detected.

3.2 Hypotheses

We were then left with asking the more limited question: if the program had been able to achieve exposure at a higher level would it have been effective? This is a relevant question from a policy perspective, since it allows us to consider whether an alternative strategy to assure exposure, for example, buying time, might be worthwhile. Ultimately, the low level of exposure achieved by the campaign allowed us to test only one evaluation hypothesis:

Research Hypothesis 1: The "It's Your Business" series was effective among the few individuals reached by the campaign.

In other words, was the series effective for individuals who were classified as exposed to the campaign, based on the criteria discussed above? Did it lead them to express stronger anti-domestic violence beliefs, attitudes, norms, or behavior with regard to intervention than individuals who were not exposed to the campaign?

This hypothesis can only be tested by looking at differences among individuals measured after the campaign who *claimed* more or less exposure to the series, estimating the association between exposure and outcome. The primary competing hypothesis to a causal interpretation of these associations is one of selective exposure: that individuals with pre-existing interest in the issue, or with some other characteristic, were more likely to be exposed and recall exposure to the campaign as well as to report anti-domestic norms, beliefs, attitudes, and behavior. If so, any observed differences between the exposed and non-exposed groups would not be attributable to the campaign.

To increase our confidence that any observed differences between those classified as exposed to the series and those not exposed were genuine, we made several assumptions about the patterns of results we would expect to see if the campaign really did have an impact, taking advantage of the fact that we had three exposure groups: (1) those who passed our stringent test of exposure and who we were reasonably sure had been somewhat exposed to the series, although in most cases in a quite limited way – we'll call them 'moderately exposed'; (2) those who had claimed exposure but did not satisfy the stringent criterion for exposure, and whom we classified as 'ambiguously exposed'; and (3) the largest group, who made no claim of exposure, called 'no exposure'.

Hypothesis 1a: Individuals in the moderate exposure category should have higher anti-domestic violence outcomes than individuals in the non-exposed category.

This is a basic test of the campaign's impact, and does not address the primary competing hypothesis of selective exposure. However, we needn't worry about selective exposure if there is no evidence that respondents with higher levels of reported exposure to "It's Your Business" had stronger anti-domestic violence outcomes than those who did not report exposure.

To test the primary competing hypothesis, we proposed that Hypothesis 1a above was a necessary but not sufficient condition for demonstrating effects. Additionally, it would have to be established that:

Hypothesis 1b: Individuals in the moderate exposure category should have higher anti-domestic violence outcomes than individuals in the ambiguously exposed category.

We are not necessarily claiming that the 'ambiguously exposed' individuals were falsely reporting exposure, only that their exposure to the series was so limited that it is unrealistic to expect that it could have produced an effect. For example, if a respondent cannot provide a general description of the series in response to a multiple choice question, it is unlikely that he or she was paying enough attention so that his/her attitude about domestic violence could have been affected.

A first test of selective exposure, then, is to establish that those who were definitively exposed to the campaign had clearer anti-domestic violence outcomes than did those either mistakenly reporting exposure or scarcely exposed to the series. Both of these groups were claiming exposure to the series. If the association between exposure and outcomes was merely an artifact of prior interest in the issue, one might hypothesize that both groups would be similarly affected, and one would expect them to look the

same on the outcomes. In contrast, if there were an effect of hearing the program then the moderately exposed group would be expected to have higher outcomes. While this would not completely eliminate the possibility of selective exposure, it would certainly help in the process. Once we could establish the existence of such differences, we could then determine if there were other background variables, such as demographic variables, including age and education; prior experience with domestic violence; and different forms of racial identification that somehow accounted for the exposure-outcome relationship.

3.3 Outcome Measures

Several sets of outcome variables were identified for analysis on the basis of the literature and preliminary surveys. The measures included the following broad categories: 1) general beliefs and opinions about domestic violence; 2) beliefs about talking with victims; 3) intentions regarding talking with victims; 4) actual talk with victims; 5) beliefs and opinions regarding talk with others about domestic violence; and 6) actual talk with others about domestic violence. The results of the analysis that follow are divided into the three categories of outcomes -- general beliefs about domestic violence, and outcomes relating to the two behaviors of talking to a victim, and general talk condemning domestic violence. All of the beliefs were measured on a 1 to 5 scale, ranging from strongly disagree to strongly agree. All of the intentions and behaviors were dichotomous measures.

3.4 Analysis Procedures

To test Hypothesis 1a and b, two separate sets of analyses were conducted, one for presentation purposes, and one to conduct statistical tests of the hypotheses. For presentation purposes, the means or percentages (in the case of dichotomous variables) for the three separate exposure groups are presented in the table below. However, because none of the outcome variables were truly interval (some of the beliefs were measured on a scale ranging from 1 to 5; otherwise the values were dichotomous), the more appropriate statistical test relied upon the gamma statistic, a measure of ordinal association. For tests using gamma, two separate tests were run: one comparing the moderate exposure group with the non-exposed group, and one comparing the moderate group with the ambiguously exposed group. For any given outcome variable, if gamma was statistically significant and in the right direction for the moderate/non-exposed comparison (with the moderate exposure group displaying higher anti-domestic beliefs, attitudes, or behavior), Hypothesis 1a would be supported. If gamma was statistically significant and in the right direction for the comparison of the moderate and ambiguously exposed groups Hypothesis 1b would be supported. For any given outcome variable, if both hypotheses 1a and b were supported, the general Research Hypothesis would be supported.

3.5 Results

Research Hypothesis 1a

First, there is evidence consistent with an effect considering the comparison between the moderate and no exposure groups only, or Research Hypothesis 1a (See Table 2). For 10 of the 27 outcomes, respondents in the moderate exposure category expressed stronger anti-domestic beliefs, intentions, and/or behaviors than those who were not exposed to the campaign at a statistically significant level (p < .05). If we make a correction for the multiple tests conducted, and assume that 2 of the 27 tests produced a statistically significant result by chance, we would still find 8 statistically significant results. Moreover, if we ignore statistical significance in favor of examining the overall trend of the results, we find that Research Hypothesis 1a is supported for 21 of the 27 outcomes; this number far exceeds what we would expect by chance (about 13 or 14).

However, before we can conclude that the "It's Your Business" campaign was effective, at least for those who were reasonably exposed to the campaign, we must first address the concerns which prompted Research Hypothesis 1b: that the results reported above represent actual differences due to the campaign, rather than differences due to selective exposure/attention.

Research Hypothesis 1b

This analysis suggests that the differences between the "moderate" and "no" exposure groups are more likely a function of selective exposure rather than the campaign itself. We would expect that genuine effects of the campaign would be reflected in the fact that individuals who knew what the series was about, and who heard multiple episodes or heard the same episode multiple times (the moderate exposure category) should have stronger anti-domestic violence outcomes than individuals who claimed to have heard the series, but either could not provide a minimal description, or did not report multiple exposures (the ambiguously exposed). This was not the case.

For only 2 of the 27 outcomes did the moderate exposure group display stronger anti-domestic outcomes than the ambiguously exposed at a statistically significant level (p < .05). Since we conducted so many tests, we cannot be confident that these results are not a function of chance. Looking at the overall trend of results while ignoring statistical significance, we see 18 of 27 outcomes for which the moderately exposed had greater anti-domestic violence beliefs, intentions or behavior. While this is a clear majority of outcomes, it is only about 4 more, and not significantly more, than we might expect to see due to

chance alone (assuming that chance would produce stronger anti-domestic violence outcomes among the moderately exposed about half (13 or 14 times out of 27) of the time).

These results suggest that there is little reliable difference with respect to anti-domestic violence beliefs, intentions, or behavior among individuals whom we believe to be moderately exposed to the "It's Your Business" and those who were less exposed; Research Hypothesis 1b was not supported.

Table 2: Comparisons between Moderate Exposure, No Exposure, and Ambiguous Exposure

Outcomes	Grand	NE*	ME*	AE*	Gamma	ME>NE	Gamma	ME>AE
	Mean/%	Mean/%	Mean/%	Mean/%	Value		Value	
	SE	SE	SE	SE	ME vs.		ME vs.	
		(N)	(N)	(N)	NE	*= ME	AE	*=ME >
					Approx.	> NE at	Approx.	AE at p
					sign	p < .05	sign	< .05
General Beliefs about Dome	estic Violei	nce (1-5 sca	ale—1 stro	ngly disag	ree to 5 str	ongly agre	ee)	
Domestic violence is one of the most	3.40	3.13	3.49	3.57	.203	Yes	.022	Yes
important problems in your community	.08	.07	.20	.13	.055		.856	
		(446)	(61)	(148)				
You do not like talking with others about their	3.35	3.16	.372	3.19	259	Yes*	258	Yes*
private lives	.08	.07	.20	.13	.008		.017	
		(450)	(61)	(148)				
You don't really know what you can do to help	2.99	2.72	3.36	2.88	306	Yes*	241	Yes*
reduce domestic violence in your community	.09	.08	.21	.14	.001		.023	
		(450)	(61)	(148)				
Beliefs about Talking to a Victim of	of Domestic	c Violence	(1-5 scale-	–1 strongly	y disagree	to 5 strong	ly agree)	
Talking to an abused woman will help her	4.18	4.19	4.20	4.16	.045	Yes	.008	Yes
improve her situation	.06	.06	.16	.10	.710		.950	
		(453)	(61)	(148)				
You know how to begin a conversation with an	3.73	3.52	3.92	3.76	.203	Yes*	.038	Yes
abused woman about her situation	.08	.07	.19	.12	.049		.749	
		(450)	(61)	(148)				
If a woman's partner found out you spoke to	2.11	2.02	2.15	2.15	092	Yes	046	Yes
her, he might abuse her more	.07	.06	.17	.11	.389		.695	
		(450)	(61)	(148)				
If you spoke to a woman about her abuse she	2.27	2.33	2.18	2.31	.103	No	.093	No
might get angry with you	.07	.06	.17	.11	.339		.441	
		(450)	(61)	(148)				
You would ask a woman about her abuse even	3.59	3.24	3.90	3.63	.343	Yes*	.112	Yes
if you thought it would make her feel badly	.08	.07	.20	.13	.001		.344	
		(451)	(61)	(147)				
People who are important to you expect you to	3.76	3.53	3.89	3.87	.181	Yes	021	No
talk to an abused woman about her situation	.08	.07	.19	.12	.080		.860	
				·				

Intentions to Talk to a Victim/ Say the Right Thing (% who said yes)

Imagine that you suspect a woman is being physically abused by her

partner BUT SHE HAD NEVER TALKED TO YOU ABOUT IT. Would you raise the issue with her.

	A. If she were a co-worker?	74.7%	64.3%	78.7%	81.1%	.344	Yes*	074	No
		.02	.02	.06	.04	.015		.697	
			(443)	(61)	(148)				
В.	if she were a neighbor who you didn't	44.3%	37.6%	47.5%	44.6%	.200	Yes	.059	Yes
	know very well?	.03	.02	.06	.04	.149		.698	
			(449)	(61)	(148)				
C.	if she were a stranger you noticed in a	19.9%	19.5%	21.3%	18.9%	.057	Yes	.074	Yes
	supermarket?	.02	.02	.05	.03	.740		.697	
			(447)	(61)	(148)				

^{*} NE = not exposed ME= moderately exposed AE = ambiguously exposed

Table 2(cont.): Comparisons between Moderate Exposure, No Exposure, and Ambiguous Exposure

Outcomes	Grand	NE*	ME^*	AE^*	Gamma	ME>NE	Gamma	ME>AE
	Mean/%	Mean/%	Mean/%	Mean/%	Value		Value	
	SE	SE	SE	SE	ME vs.		ME vs.	
		(N)	(N)	(N)	NE	*= ME	AE	*=ME >
					Approx.	> NE at	Approx.	AE at p
					sign	p < .05	sign	< .05
Suppose you are having a conversation with a fr say any of the following statements to her about		_	ised by her	husband or	r boyfriend.	Please tel	ll me if you	would
A. It's not your fault. There is no excuse for	87.4%	82.7%	90.2%	89.2%	.314	Yes	.053	Yes
his hitting you.	.02	.02	.05	.03	.081		.832	
nis nuing you.	.02	(451)	(61)	(148)	.001		.032	
B. You can't make a big deal about it, he	3.31%	3.54%	1.63%	4.76%	376	Yes	500	Yes
_					.304	168		168
probably had a hard day.	.01	.01	.02	.02	.304		.194	
		(451)	(61)	(147)				
C. There are people in the community who	92.5%	88.4%	96.7%	92.5%	.591	Yes*	.409	Yes
you can turn to for support	.02	.01	.04	.03	.004		.183	
		(455)	(61)	(147)				
D Ston doing whatman is making him	9.59%	12.0%	6.56%	10.2%	320	Yes	236	Yes
D. Stop doing whatever is making him so								
D. Stop doing whatever is making him so angry.	.02	.02	.04	.03	.127		.367	
angry. Behav Asked only of people who said they had strong	vior- Talki reason to l	(450)	(61)	(147) ho said yes)	hysically al		e r
angry. Behav Asked only of people who said they had strong the strong of the people who said they had strong the strong of the past three more than the past three more thr	vior- Talki reason to l ONTHS	(450) ing to a Vio	(61) ectim (% wl	(147) ho said yes they knew i) had been p		bused by he	
angry. Behav Asked only of people who said they had strong the hashand or boyfriend In the PAST THREE MODIC Did you talk to other people about her	vior- Talki reason to l ONTHS 77.2%	(450) ing to a Vio	(61) etim (% wl	(147) ho said yes they knew i) had been p .692	hysically al Yes*	bused by he	Yes
angry. Behav Asked only of people who said they had strong the hash and or boyfriend In the PAST THREE MODIC Did you talk to other people about her	vior- Talki reason to l ONTHS	(450) ing to a Vio believe than 64.6%	(61) etim (% wl t a woman a 90.9%	(147) ho said yes they knew if 76.2% .06) had been p		bused by he	
angry. Behave Asked only of people who said they had strong the hash and or boyfriend In the PAST THREE Mode and you talk to other people about her situation?	vior- Talki reason to b ONTHS 77.2% .04	(450) ing to a Videbelieve than 64.6% .04 (127)	(61) etim (% wlastim ((147) ho said yes they knew i 76.2% .06 (63)	.692 .002	Yes*	.515 .077	Yes
Behav Asked only of people who said they had strong thusband or boyfriend In the PAST THREE MODIA you talk to other people about her situation? Some people have a chance to talk to victims	vior- Talki reason to b ONTHS 77.2% .04	(450) ing to a Vid believe than 64.6% .04 (127) 70.9%	(61) etim (% wl t a woman a 90.9% .10 (22) 68.2%	(147) ho said yes they knew if 76.2% .06 (63) 84.1%	.692 .002		.515 .077	
Asked only of people who said they had strong thusband or boyfriend In the PAST THREE MODIL Did you talk to other people about her situation? Some people have a chance to talk to victims and others don't. How about you – did you	vior- Talki reason to b ONTHS 77.2% .04	(450) ing to a Vid believe than 64.6% .04 (127) 70.9% .04	(61) etim (% wlastim ((147) ho said yes they knew is 76.2% .06 (63) 84.1% .06	.692 .002	Yes*	.515 .077	Yes
Behave Asked only of people who said they had strong the husband or boyfriend In the PAST THREE MODIC Did you talk to other people about her situation? Some people have a chance to talk to victims and others don't. How about you – did you talk to the woman about her situation?	vior- Talki reason to b ONTHS 77.2% .04 74.4%	(450) ing to a Vid believe that 64.6% .04 (127) 70.9% .04 (127)	(61) etim (% wl t a woman a 90.9% .10 (22) 68.2% .09 (22)	(147) ho said yes they knew if 76.2% .06 (63) 84.1% .06 (63)	.692 .002 063	Yes*	.515 .077 424	Yes
Behave Asked only of people who said they had strong thusband or boyfriend In the PAST THREE MODIL Did you talk to other people about her situation? Some people have a chance to talk to victims and others don't. How about you – did you talk to the woman about her situation? Who first brought up the subject, you or the	vior- Talki reason to b ONTHS 77.2% .04 74.4% .04	(450) ing to a Videbelieve than 64.6% .04 (127) 70.9% .04 (127) 54.4%	(61) etim (% wl t a woman a 90.9% .10 (22) 68.2% .09 (22) 46.7%	(147) ho said yes they knew is 76.2% .06 (63) 84.1% .06 (63) 51.9%	.692 .002 063 .802	Yes*	.515 .077 424 .151	Yes
Behave Asked only of people who said they had strong thusband or boyfriend In the PAST THREE MODIA you talk to other people about her situation? Some people have a chance to talk to victims and others don't. How about you – did you talk to the woman about her situation? Who first brought up the subject, you or the woman?	vior- Talki reason to b ONTHS 77.2% .04 74.4%	(450) ing to a Vid believe that 64.6% .04 (127) 70.9% .04 (127) 54.4% .05	(61) etim (% wl 4 a woman a 90.9% .10 (22) 68.2% .09 (22) 46.7% .13	76.2% .06 (63) 84.1% .06 (63) 51.9%	.692 .002 063	Yes*	.515 .077 424	Yes
Behave Asked only of people who said they had strong thusband or boyfriend In the PAST THREE MODIC Did you talk to other people about her situation? Some people have a chance to talk to victims and others don't. How about you – did you talk to the woman about her situation? Who first brought up the subject, you or the woman? (% saying respondent)	vior- Talki reason to b ONTHS 77.2% .04 74.4% .04 51.0%	(450) ing to a Videbelieve than 64.6% .04 (127) 70.9% .04 (127) 54.4% .05 (90)	(61) etim (% wl t a woman a 90.9% .10 (22) 68.2% .09 (22) 46.7% .13 (15)	(147) ho said yes they knew is 76.2% .06 (63) 84.1% .06 (63) 51.9% .07 (52)	.692 .002 063 .802 155	Yes* No	.515 .077 424 .151 105 .720	Yes No
Behave Asked only of people who said they had strong thusband or boyfriend In the PAST THREE MODIC Did you talk to other people about her situation? Some people have a chance to talk to victims and others don't. How about you – did you talk to the woman about her situation? Who first brought up the subject, you or the woman? (% saying respondent) Beliefs about General Talk Condemnation.	77.2% .04 74.4% .04 51.0%	(450) ing to a Videbelieve that 64.6% .04 (127) 70.9% .04 (127) 54.4% .05 (90) stic Violen	(61) etim (% wl d a woman d 90.9% .10 (22) 68.2% .09 (22) 46.7% .13 (15) cc (1-5 scal	76.2% .06 (63) 84.1% .06 (63) 51.9% .07 (52)	.692 .002 063 .802 155 .578	Yes* No No	.515 .077 424 .151 105 .720	Yes No
Behave Asked only of people who said they had strong thusband or boyfriend In the PAST THREE MODIC Did you talk to other people about her situation? Some people have a chance to talk to victims and others don't. How about you — did you talk to the woman about her situation? Who first brought up the subject, you or the woman? (% saying respondent) Beliefs about General Talk Condemnate of the people told each other they	77.2% .04 74.4% .04 51.0% .05	(450) ing to a Videbelieve than 64.6% .04 (127) 70.9% .04 (127) 54.4% .05 (90) stic Violen 3.96	(61) etim (% wl f a woman a 90.9% .10 (22) 68.2% .09 (22) 46.7% .13 (15) ce (1-5 scal	(147) ho said yes they knew is 76.2% .06 (63) 84.1% .06 (63) 51.9% .07 (52) le—1 stron 4.28	.692 .002 063 .802 155 .578	Yes* No	.515 .077 424 .151 105 .720 ngly agree	Yes No
Behave Asked only of people who said they had strong thusband or boyfriend In the PAST THREE MODIC Did you talk to other people about her situation? Some people have a chance to talk to victims and others don't. How about you – did you talk to the woman about her situation? Who first brought up the subject, you or the woman? (% saying respondent) Beliefs about General Talk Condemn If more people told each other they disapproved of domestic violence, it would go	77.2% .04 74.4% .04 51.0%	(450) ing to a Videbelieve that 64.6% .04 (127) 70.9% .04 (127) 54.4% .05 (90) stic Violen 3.96 .07	(61) etim (% wl t a woman a 90.9% .10 (22) 68.2% .09 (22) 46.7% .13 (15) ce (1-5 scal 4.48 .18	(147) ho said yes they knew h 76.2% .06 (63) 84.1% .06 (63) 51.9% .07 (52) le—1 stron 4.28 .11	.692 .002 063 .802 155 .578	Yes* No No	.515 .077 424 .151 105 .720	Yes No
Behave Asked only of people who said they had strong thusband or boyfriend In the PAST THREE MODIC Did you talk to other people about her situation? Some people have a chance to talk to victims and others don't. How about you – did you talk to the woman about her situation? Who first brought up the subject, you or the woman? (% saying respondent)	77.2% .04 74.4% .04 51.0% .05	(450) ing to a Videbelieve than 64.6% .04 (127) 70.9% .04 (127) 54.4% .05 (90) stic Violen 3.96	(61) etim (% wl f a woman a 90.9% .10 (22) 68.2% .09 (22) 46.7% .13 (15) ce (1-5 scal	(147) ho said yes they knew is 76.2% .06 (63) 84.1% .06 (63) 51.9% .07 (52) le—1 stron 4.28	.692 .002 063 .802 155 .578	Yes* No No	.515 .077 424 .151 105 .720 ngly agree	Yes No
Behave Asked only of people who said they had strong thusband or boyfriend In the PAST THREE MODIDITY Did you talk to other people about her situation? Some people have a chance to talk to victims and others don't. How about you — did you talk to the woman about her situation? Who first brought up the subject, you or the woman? (% saying respondent) Beliefs about General Talk Condemn If more people told each other they disapproved of domestic violence, it would go a long way to stopping the abuse	77.2% .04 74.4% .04 51.0% .05	(450) ing to a Videbelieve that 64.6% .04 (127) 70.9% .04 (127) 54.4% .05 (90) stic Violen 3.96 .07	(61) etim (% wl t a woman a 90.9% .10 (22) 68.2% .09 (22) 46.7% .13 (15) ce (1-5 scal 4.48 .18	(147) ho said yes they knew h 76.2% .06 (63) 84.1% .06 (63) 51.9% .07 (52) le—1 stron 4.28 .11	.692 .002 063 .802 155 .578	Yes* No No	.515 .077 424 .151 105 .720 ngly agree	Yes No
Behave Asked only of people who said they had strong thusband or boyfriend In the PAST THREE Mode Did you talk to other people about her situation? Some people have a chance to talk to victims and others don't. How about you – did you talk to the woman about her situation? Who first brought up the subject, you or the woman? (% saying respondent) Beliefs about General Talk Condemn If more people told each other they disapproved of domestic violence, it would go a long way to stopping the abuse It is important for men to talk with each other	77.2% .04 74.4% .04 51.0% .05 ing Domes	(450) ing to a Videbelieve than 64.6% .04 (127) 70.9% .04 (127) 54.4% .05 (90) stic Violen 3.96 .07 (452)	(61) etim (% wl t a woman a 90.9% .10 (22) 68.2% .09 (22) 46.7% .13 (15) ce (1-5 scal 4.48 .18 (61)	(147) ho said yes they knew h 76.2% .06 (63) 84.1% .06 (63) 51.9% .07 (52) le—1 stron 4.28 .11 (148)	.692 .002 063 .802 155 .578 	Yes* No No Yes*	.515 .077 424 .151 105 .720 ngly agree	No No Yes
Behave Asked only of people who said they had strong thusband or boyfriend In the PAST THREE MODIC Did you talk to other people about her situation? Some people have a chance to talk to victims and others don't. How about you – did you talk to the woman about her situation? Who first brought up the subject, you or the woman? (% saying respondent) Beliefs about General Talk Condemn If more people told each other they disapproved of domestic violence, it would go	77.2% .04 74.4% .04 51.0% .05 ing Domes 4.24 .07	(450) ing to a Videbelieve that 64.6% .04 (127) 70.9% .04 (127) 54.4% .05 (90) stic Violen 3.96 .07 (452) 4.13	(61) etim (% wl d a woman d 90.9% .10 (22) 68.2% .09 (22) 46.7% .13 (15) ce (1-5 scal 4.48 .18 (61) 4.44	(147) ho said yes they knew is 76.2% .06 (63) 84.1% .06 (63) 51.9% .07 (52) le—1 stron 4.28 .11 (148) 4.51	.692 .002 063 .802 155 .578 266 .014	Yes* No No Yes*	.515 .077 424 .151 105 .720 018	No No Yes

.09	.08	.21	.13	.004		.195	
	(454)	(61)	(148)				
4.34	4.27	4.21	4.53	007	No	269	No
.07	.06	.16	.11	.957		.097	
	(453)	(61)	(148)				
3.55	3.58	3.51	3.55	002	No	040	No
.09	.08	.22	.14	.986		.750	
	(452)	(61)	(148)				
General 7	Talk Cond	emning D	V (% saying	g yes)			
56.0%	48.8%	59.0%	60.1%	.204	Yes	023	No
.03	.02	.06	.04	.133		.881	
	(455)	(61)	(148)				
35.9%	28.3%	44.4%	34.8%	.339	Yes	.199	Yes
.03	.03	.08	.05	.075		.323	
	(219)	(36)	(89)				
40.4%	46.4%	44.4%	30.3%	039	No	.295	Yes
.03	.03	.08	.05	.830		.145	
	(220)	(36)	(89)				
	4.34 .07 3.55 .09 General 7 56.0% .03	(454) 4.34	(454) (61) 4.34	(454) (61) (148) 4.34 4.27 4.21 4.53 .07 .06 .16 .11 (453) (61) (148) 3.55 3.58 3.51 3.55 .09 .08 .22 .14 (452) (61) (148) General Talk Condemning DV (% saying 19) 56.0% 48.8% 59.0% 60.1% .03 .02 .06 .04 (455) (61) (148) 35.9% 28.3% 44.4% 34.8% .03 .03 .08 .05 (219) (36) (89) 40.4% 46.4% 44.4% 30.3% .03 .03 .08 .05	(454) (61) (148) 4.34 4.27 4.21 4.53 007 .07 .06 .16 .11 .957 (453) (61) (148) 3.55 3.58 3.51 3.55 002 .09 .08 .22 .14 .986 (452) (61) (148) General Talk Condemning DV (% saying yes) 56.0% 48.8% 59.0% 60.1% .204 .03 .02 .06 .04 .133 (455) (61) (148) 35.9% 28.3% 44.4% 34.8% .339 .03 .03 .08 .05 .075 (219) (36) (89) 40.4% 46.4% 44.4% 30.3% 039 .03 .03 .08 .05 .830	(454) (61) (148) 4.34 4.27 4.21 4.53 007 No .07 .06 .16 .11 .957 (453) (61) (148) 3.55 3.58 3.51 3.55 002 No .09 .08 .22 .14 .986 .986 .986 .986 .986 .986 .986 .986 .986 .989 .986 .986 .989 .986 .986 .989 .986 .986 .986 .986 </td <td>(454) (61) (148) 4.34 4.27 4.21 4.53 007 No 269 .07 .06 .16 .11 .957 .097 (453) (61) (148) 3.55 3.58 3.51 3.55 002 No 040 .09 .08 .22 .14 .986 .750 (452) (61) (148) General Talk Condemning DV (% saying yes) 56.0% 48.8% 59.0% 60.1% .204 Yes 023 .881 (455) (61) (148) 35.9% 28.3% 44.4% 34.8% .339 Yes .199 .03 .03 .03 .08 .05 .075 .323 (219) (36) (89) 40.4% 46.4% 44.4% 30.3% 039 No .295 .03 .03 .03 .08 .05 .830 .145</td>	(454) (61) (148) 4.34 4.27 4.21 4.53 007 No 269 .07 .06 .16 .11 .957 .097 (453) (61) (148) 3.55 3.58 3.51 3.55 002 No 040 .09 .08 .22 .14 .986 .750 (452) (61) (148) General Talk Condemning DV (% saying yes) 56.0% 48.8% 59.0% 60.1% .204 Yes 023 .881 (455) (61) (148) 35.9% 28.3% 44.4% 34.8% .339 Yes .199 .03 .03 .03 .08 .05 .075 .323 (219) (36) (89) 40.4% 46.4% 44.4% 30.3% 039 No .295 .03 .03 .03 .08 .05 .830 .145

^{*} NE = not exposed ME= moderately exposed AE = ambiguously exposed

4. Summary and Conclusions

In many ways this was an innovative and important program, breaking ground in the creation of public service announcements. Nonetheless, our evaluation leads to two negative summary statements. The "It's Your Business" Campaign was not able to convince the target radio stations to play the program as scheduled; as a result in three cities there was virtually no exposure. In the fourth, where it was broadcast in only approximate conformity with the proposed schedule, there was minimal exposure, and less than 10% of the people who claimed to be listeners to the stations where it was broadcast established that they were credibly exposed. Second, even among those who were exposed to the program, the apparent advantage they held in desirable beliefs, attitudes, norms and behaviors, was most likely an artifact of selective perception. The exposure they achieved was not likely to have been enough to affect these outcomes.

So, how can these results be interpreted? On the one hand, they add one more reason to be skeptical about the promise of donated broadcast time as a means of achieving substantial exposure to social messages. In this situation, the Fund obtained the endorsement of and some distribution assistance from the Advertising Council, and the American Urban Radio Network. The programs were innovative, and

produced with a high level of professional skill by a group of experienced script writers and by the Uniworld advertising agency. The Fund directly and repeatedly contacted public service directors in each of the four local markets and obtained promises of participation. Nonetheless, the schedule of broadcasts needed to make the program work could not be achieved.

While it is difficult to know for sure why the planned schedule was not realized, the simplest explanation may be a financial one. The stations were asked to donate 90 seconds of 'good' time several times a day, every day for 12 weeks, and that was more than they were able to do. Other complementary explanations are also viable: the 90 second format and the use of a continuing story line was unusual and difficult to program; there wasn't enough local support for the broadcasts to complement the requests from outside groups; the delivered product was less appealing to local stations than it had promised to be. Still, if an advocacy agency wants to consider unpaid public service announcements as a primary channel to its audience these results (and others) would have to leave an agency wary.

The second issue is what to conclude about the failure to find evidence that the exposure which was achieved affected behavior. Here we are more reluctant to come to a clear conclusion. We cannot say that "if only they could have bought time, they would have been effective." We don't have evidence for that. But, contrarily, we are not ready to go in the opposite direction, either. The great majority of 61 individuals whom we classified as "moderately" exposed were not exposed to the series with the reach or frequency intended by the campaign's creators, and they were not exposed in a social context where the program was the subject of local discussion. Only eight respondents in the entire Louisville 'after' sample of 663 individuals claimed that they had heard even half of the total episodes. Because so few people heard the program, there was no likelihood that it would be the subject of discussion among social networks; there could be no multiplication and reinforcement of messages that was central to the underlying model of effect. Our conclusion that there was no effect on the moderately exposed group does not preclude the possibility that such effects would have been seen at higher individual doses, or if exposure had been widespread.

Thus, this evaluation points only to the failure to achieve exposure as the explanation for the failure of the It's Your Business series. We suspect that, too often, the failures of mass mediated public health interventions have been attributed to faulty message design, or to the supposed ability of communication to affect only awareness but not persuade people to adopt new beliefs or behaviors. Often, such failures ought to be attributed first to a failure to achieve adequate exposure; in reality very few individuals were ever exposed to the messages with any substantial frequency (Hornik, 1996; Hornik, 1998). Public health

communicators have become very able at developing good messages which have some hope of influencing their audiences, but they may be far less effective at achieving the exposures needed. Perhaps we need better work on understanding how exposure can be achieved, and how to maximize effects from limited exposure, to complement our work on developing messages and their theory. We cannot understand the real-world conditions under which messages might be effective if individuals are never exposed to them.

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