

The following is a response to questions from the June 1, 2006 Advisory Committee meeting, asking for a comparison between the “effectiveness statistics” for the media campaigns reviewed and 1.) standard business advertising and marketing, and 2.) other public outreach campaigns.

Standard Business Advertising Versus the Effectiveness of the Campaigns Reviewed

Advertising and marketing is a multi-million dollar industry. In 2004 alone, the top 100 worldwide advertisers spent \$93.9 billion, according to *Advertising Age's 19th Annual Global Marketing Report*. In 2005, total U.S. ad spending reached \$143.3 billion, according to TNS Media Intelligence. How effective were those ad campaigns in achieving their goals?

Fortunately, we don't have to tackle that question in any great depth. There is an entire field of media researchers who evaluate the effectiveness of advertising expenditure; these are professionals who make their living offering advice about exactly the right mix of advertising, marketing, and promotion and the expected profits that it will generate, based on their evaluations of existing advertising techniques. Our task is to determine if we can use comparisons between this world of advertising and our review of national media campaigns, which seek to “advertise” various stormwater messages, in order to arrive at some benchmark of “effectiveness.”

The caveat to such a comparison is that there is a critical difference between the advertising for goods and services that we commonly use (hereafter referred to as “standard” advertising) and the advertising that outreach groups employ in the form of Public Service Announcements or media campaigns. That critical difference centers on the fact that standard advertising attempts to alter consumer preferences, so that consumers choose one product over another. *In other words, standard advertising attempts to alter a behavior that usually already exists, or at least closely approximates an existing behavior.*

*In direct contrast, advertising that is used by outreach groups usually seeks to initiate an entirely new behavior in the target audience or to get the target audience to stop a behavior. **Whereas the goal of standard advertising is a relatively small behavior change that requires “little expense or effort and no dramatic change in lifestyle,”¹ the goals of outreach advertising often require significant sacrifice on the part of the target audience.***

For example, envision one of those ubiquitous commercials for some brand of laundry detergent. Proctor & Gamble (the world's number one advertiser and first company ever to do so) spends money advertising Tide, so that you will stop doing your laundry with Wisk (a Unilever product). Of course, price is likely to be a large determinant of that decision for the consumer, but Proctor & Gamble are betting that even if Tide is a bit more expensive, they can persuade you that it's a better product. Note the small behavior change associated with this advertising goal. Proctor & Gamble are not trying to persuade people who never wash their clothes to begin doing so; neither are they trying to change the amount of laundry that people do nor the routine by which they do it. They just want the consumer to pour Tide into the washing machine, instead of pouring Wisk into it.

¹ Costanzo, M., Archer, D., Aronson E., & Pettigrew, T. (1986). Energy conservation behavior: the difficult path from information to action. *American Psychologist*, 41, 521-528.

Even in cases where companies advertise to recruit consumers to a new behavior (e.g. the use of teeth-whitening products), note again that the behavior requires no substantial change in lifestyle or any great sacrifice. Compare the process of recruiting people to use teeth-whitening products that they are told will make them more attractive, to the process of recruiting people to purchase and continuously use a composter.

In light of these critical differences, a comparison of the “effectiveness” of those TV commercials for the latest fast-food deal or brand of shampoo and the “effectiveness” of outreach media campaigns can be thought of as the well-known apples-and-oranges comparison! A more informative comparison, that of the stormwater media campaigns reviewed and other outreach campaigns, follows.

The Effectiveness of Other “Cause” Campaigns Versus the Effectiveness of the Campaigns Reviewed

Advertising and media campaigns have attempted to tackle “causes” ranging from smoking cessation and contraceptive use to suicide prevention, child nutrition, and recycling. The field of social marketing has evolved from this type of effort, and it offers a tremendous amount of valuable information regarding how to approach such “cause” campaigns. An evaluation of success rates of these campaigns could easily become an extensive research project. For the sake of brevity, we have decided to focus on smoking cessation, for which there is a wealth of material.

The Florida TRUTH anti-smoking campaign (formally known as the Florida Tobacco Pilot Program) was developed after a 1997 settlement that the State of Florida won against the Tobacco Industry. They received a \$200 million budget to fight youth tobacco use. (The 1998 ad campaign cost \$25 million and included 33 television commercials, 7 billboards, 8 print ads, and 4 posters.)

After the campaign, a media evaluation revealed that from 1998 to 2000, the percent of Florida middle-school students who smoked cigarettes in the past 30 days fell from 18.% to 8.6%, while the percent of Florida high-school students fell from 27.4% to 20.9%.²

In 2001, the World Health Organization produced an evaluation of smoking cessation campaigns³ across the world. Their evaluation found:

- Australia calculated a 1.8% drop in smoking among adults from May 1997 to November 1998.
- The U.S./California measured a drop in adult smoking from 26.7% in 1988 to 18.4% in 1998.
- The U.S./Massachusetts measured a drop in adult smoking from 22.6% in 1993 to 18.7% in 1999.
- The U.S./Oregon adopted the CA and MA campaigns and reported a decline in adult smoking by 35,000 individuals between 1996 and 1999.

² “Success Stories: Florida ‘truth’ campaign.” <http://www.social-marketing.org/success/cs-floridatruth.html>

³Schar, Elizabeth H. and Karen K. Gutierrez. (2001). *Smoking Cessation Media Campaigns From Around the World: Recommendations from Lessons Learned*. World Health Organization.

These few studies show a great diversity in the “effectiveness” of the smoking cessation campaigns, so what can we conclude if we try to use this in comparison to the stormwater messages that we reviewed? Is there some benchmark that we can use to gauge how effective a “cause” media campaign is?

It seems difficult to draw quantitative comparisons between campaigns targeting different behaviors. We know that evaluations of information awareness are not nearly as useful as evaluations that measure actual behavior change, because merely knowing about an issue often has little correlation to acting upon that knowledge.⁴ But even if we try to compare behavior change results, is a 3% reduction in smoking “successful?” Is a 20% reduction in the number of people who dispose of oil down a stormdrain “successful?” Is one more successful than the other?

Perhaps the better benchmark is what effect we hope the behavior change will have. In the case of behaviors impacting stormwater, a campaign designed to target behaviors that we know will improve stormwater quality and reduce the volume of runoff should be our goal. Although we will be unable to document any improvements in water quality during the life of this individual project, we hope that a focus on accomplishing long-term behavior changes such as building public support for regulatory programs that require the use of more effective BMPs, will help achieve our overall goals. In addition, behavior changes such as the creation of certification programs for lawn care providers who help minimize stormwater pollution could be another method for accomplishing more long-term, sustained stormwater improvements.

It is our hope that our work with the Stormwater Message Ad Hoc Committee will help provide us with such target goals and advice on how best to achieve them.

⁴ The following articles document that education alone has little effect upon behavior. In addition to the peer-reviewed articles footnoted, we also can draw upon anecdotal evidence such as the number of teen smokers who are recruited (approximately 3,000 each day), in spite of the prevalence of knowledge about the dangers of smoking, and the increasing rate of American obesity (about 30.5% of the American population), even as knowledge about diet and exercise becomes ubiquitous.

Geller, E. S., Erickson, J. B., & Buttram, B. A. (1983). Attempts to promote residential water conservation with educational, behavioral and engineering strategies. *Population and Environment*, 6, 96-112.

Geller, E.S. (1981). Evaluating energy conservation programs: Is verbal report enough? *Journal of Consumer Research*, 8, 331-335.

Jordan, J. R., Hungerford, H. R., & Tomera, A. N. (1986). Effects of two residential environmental workshops on high school students. *Journal of Environmental Education*, 18, 15-22.

McKenzie-Mohr, D., Nemiroff, L.S., Beers, L. & Desmarais, S. (1995). Determinants of responsible environmental behavior, *Journal of Social Issues*, 51, 139-156.

Midden, C. J., Meter, J. E., Weenig, M. H., & Zieverink, H. J. (1983). Using feedback, reinforcement and information to reduce energy consumption in households: A field-experiment. *Journal of Economic Psychology*, 3, 65-86.