Tobacco Prevention Evaluation Program UNC-CH Dept. of Family Medicine

Recommendations for 2004 North Carolina Youth Tobacco Use Prevention Media Campaign

A report prepared for the North Carolina Health and Wellness Trust Fund Commission

December 19, 2003





Tobacco Prevention Evaluation Program UNC-CH Dept. of Family Medicine

Table of Contents

		Page
1.	Executive Summary	2
2.	Literature Review	7
3.	Summary of Expert Interviews	37
4.	Summary of Stakeholder Interviews	43
5.	Appendices	47

Executive Summary

Purpose

This report presents results of a special study conducted on behalf of the Health and Wellness Trust Fund Commission of North Carolina by the UNC Tobacco Prevention and Evaluation Program. The purpose of this special study is to describe the best practice, scientific data for youth-focused tobacco countermarketing advertisements utilized in media campaigns. These data are based on assumptions that 1) television is the major medium of campaign delivery, and 2) the primary goal of the campaign is the prevention of tobacco use among North Carolina youth. The major intended use of this report is to assist the media vendor and other interested parties in North Carolina to create a successful 2004 statewide media campaign.

Overview

There is good evidence to promote the use of countermarketing campaigns to reduce youth smoking rates. This report focuses primarily on three elements of countermarketing ads that have received the most attention in the research and literature: ad content (or themes of ads), format, and emotional tone. There are a number of other areas that are not addressed, or are addressed only to a limited extent, in the literature and are therefore not included in this report; however, they should be kept in mind as additional important variables. One of these is the issue of exposure or dose: How much exposure to an ad or to a campaign is necessary in order to achieve the desired effect? Another is the production quality of an ad, which may also have a large effect on youth receptivity. An additional issue to take into account when interpreting study results is that studies in this field employ vastly different methodologies, use various outcome measures, and test a wide variety of ads. These factors have led to conflicting results in the data about which elements are most effective. Despite these contradictions, there are a number of areas in which consensus has been reached and these are described in the results section.

It is important to remember that designing an effective, educational public health message is different than designing an effective sales message. In the words of one long-time researcher on youth countermarketing interviewed for this report: "What works for selling shoes isn't the same as what works for getting kids not to do something that is bad for them. Teens don't necessarily need to *like* or feel good about ads as long as the ads get them thinking and reach them on a deeper level." A final point is that there is evidence to indicate that adult-targeted countermarketing campaigns can be equally or more effective for youth than campaigns that are solely youth-focused.

^{*} Terms that are used interchangeably throughout the report are: countermarketing advertisements/ads, counter-advertisements/ads, tobacco prevention advertisements/ads. When the terms "advertisement" or "media campaign" are used without qualification, it can be assumed that the text is referring to a countermarketing ad or campaign.

Methodology

Information was gathered from three sources for this report:

- □ A literature review focusing on ad content (themes), format, and emotional tone.
- Interviews with state and national experts in the field of tobacco countermarketing media campaigns to supplement findings from the literature review, and to gather further suggestions for the North Carolina campaign.
- □ Interviews with local experts/stakeholders to determine how best to reach North Carolina youth especially those from priority populations, and how to achieve buy-in from stakeholders and youth.

Results

The literature review, expert and stakeholder interviews suggest the following:

- □ Final ads for a campaign should be pre-tested to ensure they are on target with primary campaign goals, resonate with youth, and are consistent with the measures outlined below. Along with this, the campaign as a whole should be evaluated by collecting data from a representative, population-based sample before and after the campaign.
- □ The campaign should ensure that youth and community stakeholders "buy in" and become invested in the media campaign by their inclusion throughout the process (e.g. given an opportunity to get involved and give feedback about campaign development). The media vendor should sponsor or attend local events to promote the campaign and communicate with stakeholders throughout the process.
- Use of existing ads, if chosen based on the criteria outlined below, should be considered in addition to any new ad development. (Some ads that have proven effective across populations are the Pam Laffin and Rick ads from Massachusetts and a number of the Florida Truth campaign ads.) If existing ads are utilized, consider the addition of tags with the North Carolina campaign logo, websites and and/or resources.
- □ For the development of new ads, the media campaign for North Carolina youth tobacco prevention should strongly consider creative execution that combines the following ad themes, format, and tones:

Ad content/themes

- ✓ **Serious health consequences**: There is <u>good</u> evidence to indicate the effectiveness of ads depicting serious health consequences of tobacco use (e.g. lung cancer, serious respiratory problems, death.) Ads should not depict "older" adults (older than 55) so that the serious consequences do not appear irrelevant to a young audience (i.e. differentiate between long-term health consequences and serious health consequences). This theme is effective when used in a way that arouses strong emotions among viewers.
- ✓ **Secondhand smoke**: There is <u>good</u> evidence to indicate the effectiveness of ads depicting personal or family effects of secondhand smoke (e.g. the health effects it has on youth, or the effects youths' own smoking may have on their loved ones). Again, for this theme to be effective, it should produce a strong emotional response.
- ✓ **Industry manipulation**: There is moderate to good evidence that indicates the effectiveness of industry-themed ads with youth, particularly when this theme is used secondary to, or in conjunction with, another theme such as serious health consequences (e.g. the Janet Sackman ad, which features a former tobacco industry model who had throat and lung cancer; Truth's original Body Bags ad, which highlighted the number of people who died each day because of tobacco use).
- ✓ Addiction: There is <u>limited</u> evidence that addiction can be an effective theme, particularly in combination with other themes such as serious health consequences, secondhand smoke, and industry manipulation.
- ✓ The following themes have conflicting evidence to support their use and should therefore be avoided or used with great caution: short-term (or "cosmetic") consequences (e.g. stained teeth or bad breath), refusal skills (youth demonstrate ways to say no to tobacco use), and negative social consequences (e.g. "other teens will reject you if you smoke").

Ad format (techniques used to convey the message)

- ✓ Testimonials: There is strong evidence to indicate the effectiveness of ads using personal testimonials in which people tell moving stories about the effects tobacco has had on their health or on their loved ones (e.g. the Pam Laffin series, featuring a 31-year old mother of two who eventually died of emphysema). For new ads, some interviewees suggested the use of testimonials to youth from North Carolina tobacco farmers or former industry workers who are now suffering serious health consequences from tobacco use.
- ✓ **Graphic images**: There is <u>limited</u> evidence for the effectiveness of ad formats depicting graphic images of bodily destruction caused by tobacco use (e.g. a cancerous lung or throat, a heart dissected, etc).

✓ Themes utilizing humorous or "silly" messages in campaign ads have little evidence of effectiveness in studies or among interviewees and should be used sparingly, if at all.

Emotional tone of ads

- ✓ Negative emotional tone: There is <u>strong</u> evidence to indicate the effectiveness of ads utilizing negative emotional tone, meaning that the ad elicits feelings such as sadness, anger, fear, or shock.
- ✓ Ads with a positive emotional tone (eliciting emotions such as humor, hope, or inspiration) have only limited or ineffective outcomes.

Actors

- ✓ **Multicultural** ads that depict actors from diverse ethnic groups may be particularly effective within a single ad or in the context of several ads. The depiction of ethnicity should not be "forced", however. For example, one interviewee noted that with American Indian youth, instead of using obvious stereotypes, the ad campaign could "feature small icons ... easily identified by members of the target audience. For example, one kid in the ad could wear a [UNC] Pembroke cap so that American Indian youth would know that the kid is one of them but no kids would feel excluded."
- ✓ **Edgy**: Youth featured in ads should appear to youth viewers as "edgy" in order to appeal to at-risk youth, though again, *this cannot be "forced."* Ads featuring "clean-cut, wholesome" youth may resonate more with those who do not smoke and are not open to smoking, thus having little or no effect on youth smoking rates.
- ✓ Real people: When possible, ads should utilize real people rather than actors, particularly for ads using testimonials.

<u>Additional information</u>: Detailed information from the literature review, expert, and stakeholder interviews is available in the three attached reports, and the questionnaire forms used for the expert and stakeholder interviews are included in the two appendices.

Tobacco Prevention Evaluation Program UNC-CH Dept. of Family Medicine

A Review of the Literature on Effective Dimensions of Tobacco Countermarking Advertisements

- 1. Introduction/Background
- 2. Search Strategy
- 3. Analysis of Study Design
- 4. Themes
 - a. Serious Health Consequences
 - b. Industry Manipulation
 - c. Secondhand Smoke
 - d. Short-term (Cosmetic) Consequences
 - e. Addiction
 - f. Negative Social Consequences and Social Norms
 - g. Refusal Skills
- 5. Summary of Themes
 - a. Good Evidence
 - b. Moderate to Good Evidence
 - c. Limited Evidence
 - d. Insufficient Research
- 6. Format
 - a. Testimonials
 - b. Graphic Images
 - c. Humor
 - d. Factual
 - e. "Edgy" and Youth Driven
- 7. Summary of Formats
 - a. Good Evidence
 - b. Moderate to Good Evidence
 - c. Insufficient Research
 - d. Not Recommended
- 8. Emotional Tone
 - a. Positive Emotional Tone
 - b. Negative Emotional Tone
- 9. Summary of Emotional Tone
 - a. Good Evidence
 - b. Not Recommended
- 10. Targeted Sub-Groups
 - a. Ethnic Groups
 - b. Gender
 - c. Smoking Status
- 11. Summary of Targeted Sub-Groups
 - a. Limitations
 - b. Recommendations
- 12. Limitations of the Research
 - a. Study Quality
 - b. Multidimensional Stimuli
 - c. Insufficient Research
 - d. Questionable Cost Effectiveness
- 13. References

A Review of the Literature on Effective Dimensions of Tobacco Countermarketing Advertisements

I. Introduction/Background

While adolescent smoking appears to be on the decline, 1 in 4 high school students and 1 in 10 middle school students are still smokers. To combat the threat of adolescent smoking, many state and national anti-tobacco campaigns use mass media to discourage youths from using tobacco (Farrelly et al, 2003). Evidence is growing that these campaigns are effective at reducing adolescent smoking, especially when used in combination with other programs (Sowden et al, 2003; Pechmann and Riebling, 2000A; Wakefield et al, 2003B; Farrelly et al, 2003). In 2004, North Carolina plans to begin an adolescent-targeted, television-based media campaign. This review is intended to provide some evidence-based guidelines for that campaign.

What makes an anti-tobacco advertisement effective among adolescents? Authors suggest a litany of factors, including ad content or theme, format, emotional tone, production quality, clarity and consistency (Biener et al, 2003; Pechmann et al, 2003; Schar et al, 2003). This review synthesizes the published research on three of the dimensions (theme, format, and emotional tone) that increase ad effectiveness among adolescents, including various subpopulations.

II. Search Strategy

Research on tobacco countermarketing spans a number of specialties, including medicine, marketing, business, and public health. For this reason, multiple search engines and search terms were necessary (see Tables 1 and 2). The main search terms were "countermarketing," "counter-advertising," "mass media," "adolescent," "ethnic group," and "women" (Synonyms used are listed in Table 2). Studies were selected based on relevance to the topic. Once studies were found using this method, individual online journal sites were searched for relevant articles that were possibly missed by the larger search engines. Articles, unpublished works, and grey literature were then discovered using expert interviews. Finally, reference sections of reviews and studies were utilized to find articles not listed in online search engines (snowball technique).

III. Analysis of Study Design

Advertisement effectiveness research is mostly limited to two major study designs: focus groups and quasi-experimental cross-sectional studies. While the quantity of research conducted on each variable is important, it is critical to also consider the quality of the research.

Focus group studies were analyzed using the strategy outlined in Crabtree and Miller (1999). In general, rigorous qualitative studies utilized a standardized methodology for conducting and evaluating the focus groups; a diverse participant population by gender, ethnic group, age, income level and smoking status; approximately 10 participants per group;

a maximum of 15 focus groups; and reasonable compensation for participation. A critical appraisal of each focus group can be found in Table 3.

Quasi-experimental cross-sectional studies were analyzed using strategies outlined in Fletcher et al (1996). Rigorous cross-sectional studies employed large, diverse sample sizes; used validated interventions (commercials); had high response rates, and tested multiple dimensions (format, theme, tone). A critical appraisal of each cross-sectional study can be found in Table 3.

IV. Theme

Definition

For the purpose of this review, theme, often referred to as content, is defined as the main idea within any given advertisement. Experts use several typologies to categorize themes (Pechmann and Reibling, 2000A; Goldman and Glantz, 1998, McGloin and Burritt, 2002). This review uses a combination of these approaches, yielding seven categories: serious health consequences, industry manipulation, secondhand smoke, short-term (also referred to as cosmetic) consequences, addiction, and negative social consequences/social norms.

Varying quantities of research exist for each of the seven categories. The evidence on each of the seven studied themes is described below, followed by a summary of the themes by effectiveness. A summary of the evidence for the effectiveness of each theme can be found in Table 4.

A. Serious Health Consequences

Definition

This theme focuses on the serious health consequences of smoking, including emphysema, lung cancer, other severe disease, and premature death (Pechmann et al, 2003).

Supportive Evidence

Considerable reliable data show the theme of serious health consequences is moderately to highly effective. In two quasi-experimental cross-sectional studies, Pechmann et al (2003) and Wakefield et al. (2003A) determined that adolescents regarded this theme moderately and highly effective, respectively. Similar results were found in two similar population-based survey studies conducted by Biener (2002) and Biener, et al (2003). In addition, results from a focus group study revealed that the serious health consequences theme was rated both highly effective and high in cognitive quality by youth participants (McGloin and Burritt, 2002).

Weak or Contradictory Evidence

Other studies suggest that the serious consequences theme is ineffective in anti-tobacco messages (Pechmann and Goldberg, 1998; Goldman and Glantz, 1998; McKenna and Williams, 1993). Pechmann and Goldberg (1998) performed a quasi-experimental cross-sectional study that found that adolescents rated this theme ineffective at changing intention to smoke. Both a review of focus group data (Goldman and Glantz, 1998) and a small focus group study (McKenna and Williams, 1993) found that long-term health consequences were

rated ineffective by adolescents as well. A lack of description of the methodology of these studies makes it difficult to understand why they reached different conclusions than the more rigorous studies described above. One possible explanation could be if serious consequences were presented to youth as long-term outcomes, rather than problems that could develop in earlier in life.

B. Industry Manipulation

Definition

This theme focuses on the deceitful marketing practices used by tobacco companies to sell their product (Goldman and Glantz, 1998). Many authorities posit that this theme will be effective because it challenges and raises strong negative emotions about the tobacco industry among teens (Ling and Glantz, 2002; Biener, 2002; Farrelly et al, 2002B).

Supportive Evidence

Considerable, reliable data demonstrate that industry manipulation is moderately to highly effective. A large, well-designed, population-based survey conducted by the Legacy Foundation found that the Truth™ Campaign was very effective at improving teens' intention to change behavior. The campaign relies heavily on the industry manipulation theme. In a randomized, cross-sectional, population-based survey, Biener (2002) found that adolescents rated the Massachusetts ads with an industry manipulation theme as highly effective.

Results from two focus group studies agree with the studies above. Large focus group data reported by Goldman and Glantz (1998) demonstrate this theme as effective in counter-advertising. In a smaller focus group study, McKenna and Williams (1993) showed that youth thought ads using this theme were moderately effective.

Many researchers believe this theme is most effective when paired with other themes, especially the serious health consequences theme (Biener pres, Farrelly, 2002; McGloin and Burritt, 2002). Since the Truth™ Campaign uses multiple themes, the results found in its evaluation may indicate that the multi-theme approach makes this theme very effective (Farrelly, 2002B).

Weak or Contradictory Evidence

Three studies of varying methodological strength caution against the use of the industry manipulation theme. A quasi-experimental cross-sectional study conducted by Pechmann and Goldberg (1998) showed that industry manipulation alone is ineffective at improving intention to change behavior. While the sample size is large, the study methodology is not fully described. Two methodologically strong studies agree with Pechmann and Goldberg's results. Pechmann et al. (2003) performed a cross-sectional study of 1667 seventh and eighth graders to determine which type of ads influenced an adolescent's intention to change behavior. These results indicated that industry manipulation was ineffective at changing an adolescent's intentions. A focus group study conducted by McGloin and Burritt (2002) in North Carolina revealed that adolescents judged industry manipulation to be only mildly effective. However, the authors did state that the industry theme could be successful if combined with other effective themes.

Tobacco Producing States and Industry Manipulation

As previously discussed, McGloin and Burritt (2002) found industry manipulation relatively ineffective in North Carolina. Authorities suggest that this inconsistency results because adolescents within tobacco-producing states have close contact with the tobacco industry. To refute this point, Thrasher et al (2003) used the data from the Legacy foundation surveys to show that there is no difference in rated effectiveness of industry-themed ads between tobacco producing states and non-tobacco producing states in their large data set.

C. Secondhand Smoke

Definition

Pechmann and Reibling (2000A) describe this theme as "advertisements that stress the negative impact of secondhand smoke on family members and other people, particularly infants and children (pg. ii19)."

Supporting Evidence

There are data to indicate that the theme of second hand smoke is moderately to highly effective. Two quasi-experimental studies by Pechmann et al (2003) and Pechmann and Goldberg (1998) suggest that secondhand smoke is a highly effective theme. Two focus group studies – one a review by Goldman and Glantz (1998) and one a single study by McGloin and Burritt (2002) – found that this theme was moderately to highly effective. McGloin and Burritt also found that this theme was high in cognitive quality.

D. Short-term (Cosmetic) Consequences

Definition

This theme highlights the negative cosmetic effects of tobacco, including stained teeth and bad breath. The short-term consequences theme is often found in advertisements in combination with the negative social consequences theme (Pechmann and Reibling, 2000A).

Supportive Evidence

A quasi-experimental study found that teens judged ads highlighting the short-term consequences of tobacco use to be mildly to moderately effective (Pechmann et al, 2003). A small focus group study confirmed these results (Perrachio and Luna, 1998).

Weak or Contradictory Evidence

A moderate amount of conflicting evidence exists on this theme. In a quasiexperimental cross-sectional study conducted by Pechmann and Goldberg (1998), adolescents considered this theme ineffective. In a review of focus group findings, the authors found that adolescents only rated this theme as mildly effective (Goldman and Glantz, 1998).

E. Addiction

Definition

Advertisements using this theme demonstrate the addictive properties of cigarettes and the effect of this addiction (McGloin and Burritt, 2002). This theme is often found in the testimonial format along with the industry manipulation theme.

Supportive Evidence

The limited information on the addiction theme indicates it may be an effective counter-advertising theme. In a small focus group study conducted by McGloin and Burritt (2002), the adolescents judged addiction moderately effective and high in cognitive quality (made the respondents "stop and think"). In a review of 186 focus groups, Goldman and Glantz (1998) also found this theme moderately effective, especially when used with industry manipulation or secondhand smoke.

F. Negative Social Consequences and Social Norms

Definition

The negative social consequences and social norms themes are closely associated and often appear together in the same ad. The negative social consequences theme focuses on the barriers smoking creates on the way to a successful life. The social norms theme aims to reduce the belief that smoking is acceptable behavior. Both of the themes intend to reverse the "cool, normal" depiction of tobacco users ingrained in the American culture through decades of tobacco advertising (Pechmann et al, 2003).

Supportive Evidence

Two studies by the same primary investigator found that the negative social consequences and social norms model is effective at influencing adolescents' intention to smoke. In the first study, Pechmann and Goldberg (1998) found these themes to be effective; however, the methodology of the study is not fully described. In the second study using a controlled setting to show ads to youth and get their feedback, Pechmann et al (2003) found the negative social consequences theme was effective at reducing adolescents' declared intentions to smoke.

Weak or Contradictory Evidence

The research on these themes is scant and conflicting. A review of focus group data revealed that adolescents regarded the negative social consequences theme as completely ineffective. The authors found this theme was particularly ineffective among smokers, because youth who smoked found the messages personally offensive (Goldman and Glantz, 1998).

G. Refusal Skills

Definition

This theme demonstrates ways to avoid smoking. Often, role models tell why smoking is unattractive and then demonstrate avoidance techniques (Pechmann et al, 2003). The research on this theme in anti-tobacco advertising is scarce and contradictory.

Supportive Evidence

In a quasi-experimental cross-sectional study, Pechmann et al (2003) found that adolescents regarded this theme as highly effective. However, investigators base the study largely on research performed in a laboratory over a short time period, while the Farrelly et al (2002A/B) research described below is based on "real-world," population-based samples with longer follow-up.

Weak or Contradictory Evidence

In a large, powerful quasi-experimental cross-sectional study performed by the Legacy Foundation, adolescents consistently rated the Phillip Morris campaign less effective than the Truth™ campaign. The Phillip Morris campaign relies heavily on the refusal skills model. Interestingly, younger adolescents rated this theme more favorably, but not better than the Truth™ campaign (Farrelly, 2002A).

V. Summary of Themes

A. Good Evidence

1. Serious Health Consequences

Two themes consistently rate effective – serious health consequences and second hand smoke. While some studies demonstrate that serious health consequences may be ineffective, these studies contain methodological limitations that make their results less persuasive (Goldman and Glantz, 1998; McKenna and Williams; 1993; Pechmann and Goldberg, 1998). In contrast, five studies suggest the serious health consequences theme is moderate to highly effective. A majority of these studies are well-designed, quasi-experimental studies or methodologically strong focus group studies (Pechmann et al, 2003; McGloin and Burritt, 2002; Biener, 2002; Wakefield et al, 2003A; Biener et al, 2003). For this reason, the best data indicate that the serious health consequences theme is effective in antitobacco advertisements.

2. Secondhand Smoke

While the amount of evidence for the secondhand smoke theme is moderate, the research consistently rates it as very effective. Two studies have methodological flaws or lack methodological information (Goldman and Glantz, 1998; Pechmann and Goldberg, 1998), but the remaining two studies are well-designed and persuasive (McGloin and Burritt, 2002; Pechmann et al, 2003). While this theme needs more research to confirm these studies, it is reasonable to assume it will continue to rate highly. In addition, as discussed in detail in Section 10, many experts believe this theme will be effective in targeted sub-groups.

B. Moderate to Good Evidence

1. Industry Manipulation

Some researchers hail the industry manipulation theme as the best of all themes, while others caution its use (Pechmann et al, 2003; Pechmann and Goldberg, 1998; McGloin and Burritt, 2002; McKenna and Williams, 1993; Goldman and Glantz, 1998; Farrelly et al, 2002B; Biener, 2002). While research indicates that this theme should not be used alone, many of

the authors found that industry manipulation does well when coupled with serious health consequences (McGloin and Burritt, 2002; Biener, 2002).

C. Limited Evidence

1. Short-term Consequences

The short-term or cosmetic consequences of smoking appears to be generally less effective than the themes listed above. The only two quasi-experimental studies that include this theme are split as to the effectiveness (Pechmann et al, 2003; Pechmann and Goldberg, 1998). The two focus group studies also conflict (Goldman and Glantz, 1998; Peracchio and Luna, 1998). No study finds this topic highly effective – most hover in the middle ground. Until more research is performed on this theme, marketers should use it with caution.

D. Insufficient Research

Several themes lack extensive research – addiction, refusal skills, and negative social consequences (social norms). Additionally, the data on the refusal skills and social consequences themes are contradictory (Farrelly et al, 2002A; Pechmann et al, 2003; Goldman and Glantz, 1998; Pechmann and Goldberg, 1998). For this reason, marketers should use these themes sparingly or with caution until more research exists. The addiction theme may be an exception to this.

VI. Format

Definition

For the purposes of this review, format is defined as the nature of the story or context utilized to convey the message. The typology used to categorize the different formats is a combination of schemes used elsewhere (McGloin and Burritt, 2002; Schar et al, 2003). This model presents five categories. It is important to point out that format is closely tied to both theme and emotional tone, and a great deal of overlap exists. A summary of the evidence presented below can be found in Table 5.

A. Testimonials

Definition

This format uses a story-telling approach to convey the message. Advertisements using this format often portray people who have been negatively affected by smoking (Schar et al, 2003). The serious health consequences, second hand smoke, industry manipulation, and addiction themes tend to occur with this format, and it typically has a negative emotional tone. Most experts agree that this is the most effective format (McKenna et al., 2003; Schar et al, 2003; McGloin and Burritt, 2002).

Supportive Evidence

Overwhelming support exists for the testimonial format. Three large, well-designed, quasi-experimental cross-sectional studies found that adolescents rated this format highly effective (Biener, 2002; Biener et al, 2003; Wakefield et al, 2003A). All of these studies had large, population-based samples and a strong study design. In addition to the

quasi-experimental studies, two focus groups found this format to be most effective (McGloin and Burritt, 2002; Murphy, 2000).

Celebrity Testimonials

Schar et al (2003) cautions against the use of celebrities in anti-tobacco advertisements. The review of state campaigns revealed that celebrity testimonials about personal negative consequences of smoking were more effective than ads that portrayed celebrities as role models.

B. Graphic Images

Definition

The graphic image format uses vivid images of real bodily destruction caused by tobacco (McGloin and Burritt, 2002). The serious health consequences theme is often used in conjunction with this format, and these ads typically have a negative emotional tone.

Supportive Evidence

A large, population-based study in Australia conducted by Wakefield et al (2003A) revealed that teenagers judged the graphic image format to be very effective. Likewise, in a focus group study performed by McGloin and Burritt (2002), teens found graphic images very effective. Finally, in a review of state and national anti-tobacco campaigns, Schar et al (2003) found that graphic images were very effective.

Weak or Contradictory Evidence

Only one study warns against the use of the graphic image format. In a small focus group study, Murphy (2000) found that adolescents judged graphic images to be ineffective in anti-tobacco advertisements. The study lacks a detailed description of methodology, making it difficult to discern why its results differed from other studies.

C. Humor

Definition

This format uses humor and humorous situations to deliver an anti-tobacco message (McGloin and Burritt, 2002). It is often found with the negative social consequences theme, the refusal skills theme, and the short-term consequences theme. In addition, advertisements that use this format consistently have a positive emotional tone.

Weak or Contradictory Evidence

While humor has a high recall, this format is consistently rated ineffective by all studies reviewed. In a large, quasi-experimental, cross sectional study performed by Biener (2003) teenagers often recalled humorous ads, but consistently regarded humor as an ineffective format. Two focus group studies found similar results (McGloin and Burritt, 2002; Murphy, 2000).

D. Factual

Definition

The factual format presents statistics and other tobacco-related facts that illustrate the harm of cigarettes (McGloin and Burritt, 2002, Schar et al, 2003). This format can be found with many themes and other formats, and advertisements with this format can have either a positive or negative emotional tone.

Supportive Evidence

Two focus group studies found the factual format was moderately to highly effective (McGloin and Burritt, 2002; McKenna and Williams, 1993). Additional research should be conducted to determine whether these results are consistent in larger studies.

E. "Edgy" and Youth Driven

Definition

This format uses risk-taking youth to present the anti-tobacco message (McGloin and Burritt, 2002). The industry manipulation theme (particularly within the Truth™ campaign) often accompanies this format (Farrelly et al, 2002A). While many state and national campaigns use this format, studies focusing on youth driven formats alone are limited.

Supportive Evidence

In an evaluation of the Truth[™] campaign by the Legacy Foundation, Farrelly et al (2002A/B) found that adolescents regarded the youth-driven format as very effective. This study had a large and diverse sample size, as well as a solid methodology.

Weak or Contradictory Evidence

A well-designed focus group study determined that ads using this format were generally rated ineffective by teenagers; however, when asked what they would like to see in future ads, teenagers selected this format quite often (McGloin and Burritt, 2002).

VII. Summary of Formats

A. Good Evidence

1. Testimonial Format

Two formats consistently rate effective – the testimonial format and the use of graphic images. Three well-designed cross-sectional studies supported the use of the testimonial format (Biener et al, 2003; Biener, 2002; Wakefield, 2003A). In addition, two focus group studies (McGloin and Burritt, 2002; Murphy, 2000) demonstrated that this format was the most effective.

Schar et al (2003) points out one area of caution – celebrity testimonials. According to this review of state and national anti-tobacco campaigns, celebrity testimonials are only effective when the celebrity relates how smoking has negatively affected his or her life.

B. Moderate to Good Evidence

1. Graphic Image Format

With the exception of one small focus group study (Murphy, 2000), the graphic image format rates very highly. One well-designed cross-sectional study (Wakefield et al, 2003A), one strong focus group study (McGloin and Burritt, 2002), and one review of state and national campaigns (Schar et al, 2003) consistently show that adolescents find the format to be highly effective.

C. Insufficient Research

For the factual and "edgy" formats, too little evidence exists to truly judge how effective they are. However, from the focus group research that does exist, the factual format is promising. While the "edgy" format is used in the national Truth™ campaign and the Massachusetts campaign, little research exists focusing on the format alone (Farrelly et al, 2002B; Biener et al, 2003).

D. Not Recommended

1. Humor

While teenagers recall humorous advertisements at high rates, they consistently judged these ads to be less effective. One strong cross-sectional study (Biener et al, 2003), two focus group studies (McGloin and Burritt, 2002; Murphy, 2000), and one review of state and national campaigns (Schar et al, 2003) show that teenagers find humor an ineffective format for anti-tobacco advertisements.

VIII. Emotional Tone

Definition

Emotional tone is defined as an individual's affective response to an advertisement (Biener, 2002; Biener et al, 2003). The theme and format of an advertisement partially dictate the emotional tone; therefore, certain themes and formats tend to be associated with a particular emotional tone. For the purposes of this study, emotional tone falls into two categories – positive and negative. A summary of the evidence below can be found in Table 6.

A. Positive Emotional Tone

Definition

When an advertisement elicits a positive affective response such as humor, hope, or inspiration, it conveys a positive emotional tone (Biener, 2003). Humor is the most commonly used format that elicits such a response, and is the most frequently researched.

Weak or Contradictory Evidence

At best, positive emotional tone is mildly effective. Two studies – one a quasi-experimental cross-sectional study (Biener, 2000) and one a well-designed focus group (McGloin and Burritt, 2002) – found that adolescents believe positive emotional tone is less effective than negative emotional tone.

Three additional studies confirm these results. One quasi-experimental cross-sectional study conducted by Montazeri and McEwen (1997) showed that adolescents rated positive emotional tone as ineffective, as did two smaller focus group studies (Murphy, 2000; Riester and Linton, 1998).

B. Negative Emotional Tone

Definition

An advertisement with a negative emotional tone elicits a negative affective response such as anger, sadness, fear, or shock (Biener, 2003). Several experts have proposed that negative emotional tone will be much more effective than positive emotional tone because it activates a behavioral response to remove the negative stimulus (Hill et al, 1998; Soames-Job, 1988).

Supportive Evidence

A total of eight studies determined that negative emotional tone was more effective than positive tone. Four large, well-designed quasi-experimental cross-sectional studies found that adolescents perceived advertisements with negative tone to be more effective than advertisements with positive tone (Wakefield et al, 2003A; Farrelly et al, 2002A; Biener et al, 2003; Biener, 2002). All of these studies have large, diverse sample sizes and strong study designs. One quasi-experimental cross-sectional study conducted by Montazeri and McEwen (1997) showed similar results.

Three focus group studies with varying degrees of methodological strength found results similar to the studies above. Two well-designed focus group studies found a negative emotional tone to be more effective than a positive tone (McGloin and Burritt, 2002; Stafford

Institute, 2003). A focus group study conducted by Murphy (2000) also found that negative emotional tone was more effective than positive tone.

IX. Summary of Emotional Tone

A. Good Evidence

1. Negative Emotional Tone

Strong, reliable evidence exists for negative emotional tone. Eight studies of varying study design indicate that negative tone is more effective than positive tone (Wakefield et al, 2003A, Farrelly et al, 2002A, Biener et al, 2003, Biener, 2002, McGloin and Burritt, 2002, Stafford Institute, 2003, Murphy, 2000, Montazeri and McEwen, 1997).

B. Not Recommended

1. Positive Emotional Tone

Consistent, reliable evidence exists that cautions against the use of positive emotional tone. Five studies of varying methodologies and strength showed that positive emotional tone was either ineffective or only mildly effective (Biener, 2000; Riester and Linton, 1998; Murphy, 2000; McGloin and Burritt, 2002; Montazeri and McEwen, 1997).

X. Targeted Sub-groups

A. Ethnic Groups

1n 2002, 23 percent of high school students reported smoking cigarettes in the past 30 days. These rates are not uniform; they vary by ethnic group and sex. The prevalence of smoking would indicate that smoking is not a problem among minority groups; 32 percent of white adolescents smoke, compared to 17 percent of African Americans and 23 percent of Hispanics. However, the rate of decline in smoking initiation is lower in the minority populations (Allen et al, 2003). American Indians have the highest prevalence of smoking among all ethnic groups – 39 percent (CDC, 1998B).

1. African Americans

Very little research exists on anti-smoking campaigns targeted at African American youth. Only three papers were found that discuss the differences between this subgroup and the rest of the adolescent population (Farrelly et al, 2002B; Hannon, 2000; McGloin and Burritt, 2002).

Theme

Using a theory-based approach to the topic, Hannon (2000) suggested that themes emphasizing family and social norms would be the most influential among African American youth. Results from a focus group study conducted by McGloin and Burritt (2002) support this statement because African American teens rated the secondhand smoke advertisement very effective.

Format

In the focus group study performed by McGloin and Burritt (2002), African American youth rated the graphic image format ineffective.

Spokesperson Characteristics

Hannon (2000) recommends that African American actors of various skin tones should be used in ads targeting this group. Results from the Legacy Foundation survey suggest this is an effective strategy, because ads that portrayed African American youth were rated highly by the African American participants (Farrelly et. al, 2002B).

2. Latinos

Theme

A paper by Ramirez et al (2000) recommends that anti-tobacco ads should have themes that emphasize family, social norms, secondhand smoke, and refusal skills. Only two of these themes have been studied within the Latino population. In a focus group conducted by Ramirez et al (1997), Latino teenagers found the refusal skills theme and the social norm theme effective.

These themes are not the only effective themes for targeting Latino adolescents. Results from another focus group found that the addiction theme was effective among Latino adolescents, particularly in the younger age ranges (Stafford Institute, 2003). In addition, Farrelly et al (2003B) found that the Truth™ campaign was equally effective among Latino and non-Latino youth, suggesting that themes used in the Truth campaign can also be used in this population.

In a cross-sectional study performed with adolescents and adults, Marín et al (1990) found that interventions relying on the short-term health consequences theme and secondhand smoke theme were effective at increasing the recall of the campaign.

Format

The Stafford Institute (2003) determined that the testimonial format was especially effective among the Latino population. No other studies exist that confirm the effectiveness of this or any other format in the adolescent Latino population.

Spokesperson Characteristics

Ramirez et al (2000) recommends that advertisements targeted at Latino teens should have Latino actors that speak a mix of English and Spanish. While no studies confirm the effectiveness of using Latino actors, Ramirez et al (1997) confirmed that bilingual advertisements are effective within this population.

3. American Indians

Very little data exist that demonstrate any means of targeting American Indian youth. The Stafford Institute (2003) determined that a radio ad that specifically targeted American Indian youth and tobacco use showed high receptivity among these youth in a focus group setting. However, no other studies focus on this population.

B. Gender

In 2002, 21 percent of adolescent girls smoked (Allen et al, 2003). While for years women enjoyed much lower smoking rates than men, the rate is currently nearly identical between the two groups. The rate varies greatly between ethnic groups, with American Indian women at 35 percent, whites at 24 percent, African Americans at 24 percent, and Hispanics at 15 percent (CDC, 1998A).

Theme

Very few studies examine the differences in anti-tobacco theme preferences between boys and girls. Focus group findings mentioned by Flynn et al (1995) suggest that adolescent girls rate the negative social consequences theme as effective. In a successful anti-smoking campaign reported by Worden et al (1996), an anti-tobacco intervention in girls resulted in a reduced incidence of smoking initiation. While the authors performed no formal analysis on the theme of the campaign, most ads focused on the social norm and negative social consequences theme.

Format

In the same report mentioned above by Worden et al (1996), the campaign utilized a mix of formats, but primarily used testimonials and humor. In a focus group study conducted by McGloin and Burritt (2002), adolescent girls found the graphic images format to be very effective.

C. Smoking Status

Limited information exists about the differences between smokers and non-smokers regarding thematic or format preferences or effectiveness. In the large survey conducted by the Legacy Foundation, Farrelly et al (2002B) found that smokers found the Truth™ ads to be much more effective than the Phillip Morris ads. This suggests that the industry manipulation theme and other Truth themes may be effective among this group.

In a focus group performed by Peracchio and Luna (1998), smokers were more influenced by the short-term (cosmetic) consequences theme than the serious health consequences theme. The authors suggest that adolescents are not concerned with the long-term risks associated with smoking.

XI. Summary of Targeted Sub-groups

A. Limitations

The limited research within targeted subgroups makes drawing conclusions very difficult. Without more studies in this area, it will be impossible to tell if any theme, format, or emotional tone is more effective within each subgroup. However, though there are only a few studies in this area, there are a few common ideas that allow tentative recommendations to be drawn.

B. Recommendations

1. Secondhand Smoke

Even though the research is limited, authors consistently mention the theme of secondhand smoke. For both the African American and Latino population, adolescents rated this theme effective (McGloin and Burritt, 2002; Marín et al, 1990).

2. Spokesperson Characteristics

Including a member of the target population in advertisements targeting particular subgroups is recommended by several experts (Hannon, 2000; Ramirez et al, 2000). One large, cross-sectional study found similar results (Farrelly et al, 2002B).

XII. Limitations of the Research

A. Study Quality

1. Study Design

Current research in this area is mostly limited to two designs – focus groups and quasi-experimental cross sectional studies. Within each of these groups is considerable variation in study design. Farrelly et al (2002B), Wakefield et al (2003A) and Biener (2002) rely on surveys of random samples of adolescents to determine penetration and effectiveness of the messages. Meanwhile, Pechmann et al (2003) relies on laboratory based surveys to determine which theme is most effective and why. It is unclear whether these two designs measure the same variable.

Focus group studies are inherently variable because of the nature of the group participants (Crabtree and Miller, 1999). Because of this variability, it is important when comparing studies to make sure that the focus group methodology has as little variation as possible. Unfortunately, a large number of methodologies exist for focus groups, and these varying designs are present within this field of research (Goldman and Glantz, 1998; McGloin and Burritt, 2002; Peracchio and Luna, 1998). Without detailed descriptions of the study design, summarizing results is extremely difficult.

2. Outcomes and Outcome Measures

This field of research includes a variation of outcome measures because of the variation of methodologies. Depending on the study, the researchers may be interested in the perceived effectiveness, the intention to change behavior, the cognitive quality, or simply the recall. It is unknown whether these outcomes correlate with each other, or whether they serve as secondary outcomes for actual behavior change. There are no thematic studies that measure a change in behavior. These inconsistencies make comparing the data difficult.

3. Limitations of Advertisements

Research in this area often includes the same ads in a number of studies. While this improves the validity of the data as a whole, it may result in bias. If one ad – the "Pam Laffin" ad for example – consistently rates very highly, it will bias the results toward whatever theme, format or emotional tone that the experimenter is testing.

B. Multidimensional Stimuli

As referred to above, a television advertisement has multidimensional stimuli. Authors propose many different dimensions that may influence overall effectiveness – format, theme, emotional tone, production quality, sponsorship, consistency, clarity, depiction of smoking behavior and spokesperson factors (Biener et al, 2003; Pechmann and Reibling, 2000B). The research presented in this review simplifies an ad into just one dimension in order to analyze it. However, it may be impossible to separate each of the dimensions. For example, what makes one theme effective may be the fact that it is tied to a certain format. By simplifying the data, important relationships may be missed.

C. Insufficient Research

The greatest limitation in this field is the lack of sufficiently high quality research. Currently, the most effective themes, formats, and emotional tones are indicated by a small number of focus group or survey studies. The greatest improvement in this area will result when the quality and number of the studies improves.

D. Questionable Cost Effectiveness

Recently, two studies call into question the cost-effectiveness of adolescent only-targeted mass media campaigns. Two population-based, cross-sectional studies performed in Australia indicate that campaigns targeted to adults are rated effective by adolescents (Wakefield et al, 2003A; White et al; 2003). In one of the studies, authors found that 85 percent of adolescents surveyed thought the adult-targeted campaign was aimed at them. Additionally, 85 percent thought the ads were effective and 26 percent thought about quitting because of the ads (White et al, 2003). With increasing funding difficulties, these two studies support the view that campaigns encouraging adults to quit will cause the largest reduction in tobacco consumption, because the adult-focused ads will help adults, and by example, adolescents (Hill, 1999).

References

- Allen, JA, D Vallone, MI Haviland, C Healton, KC Davis, MC Farrelly, CG Husten, and T Pechacek. "Tobacco Use Among Middle and High School Students United States, 2002." MMWR Weekly. 2003; 52(45): 1096-1098.
- Biener, Lois. "Anti-smoking Advertisements by Massachusetts and Phillip Morris: What Teenagers Think." Tobacco Control. 2002; 11(2):ii43-ii47.
- Biener, Lois. "Adult and Youth Response to the Massachusetts Anti-Tobacco Television Campaign." Journal of Public Health Management & Practice. 2000; 6(3): 40-44.
- Biener, Lois, Garth McCallum-Keeler, Amy L. Nyman. "Adults' Response to Massachusetts Anti-Tobacco Advertisements: Impact of Viewer and Advertisement Characteristics." <u>Tobacco Control</u>. 2000; 9: 401-407.
- Biener, Lois, Ming Ji, Elizabeth A Gilpin and Alison B Albers. "The Impact of Emotional Tone, Message and Broadcast Parameters in Youth Anti-Smoking Advertisements." (Unpublished)
- Crabtree, Benjamin F and William L. Miller. "Doing Qualitative Research: 2nd Edition." <u>London</u>: Sage Publications; 1999.
- Elder, John, Alan Litrownik, Donald Slymen, Nadia Campbell, Deborah Parra-Medina, Sunny Choe, Virginia Lee, Guadalupe Ayala. "Tobacco and Alcohol Use Prevention Program for Hispanic Migrant Adolescents." American Journal of Preventive Medicine. 2002; 23(4): 269-275.
- CDC. "Facts on Women and Tobacco." CDC Fact Sheet, 1998A.
- CDC. "Tips from the Surgeon General Report American Indians and Alaska Natives and Tobacco." CDC Fact Sheet, 1998B.
- Farrelly, Matthew C., Cheryl Healton, Kevin Davis, Peter Messeri, James Hersey, Lyndon Haviland. "Getting to the Truth: Evaluating National Tobacco Counter-marketing Campaigns." <u>American Journal of Public Health</u>. 2002A; 92(6): 901-908.
- Farrelly, Matthew C., Kevin C. Davis, Jared M Yarsevich, M. Lyndon Haviland, James Hersey, Maria E. Girlando, and Cheryl G. Healton. "Getting to the Truth: Assessing Youths' Reaction to the Truth™ and 'Think, Don't Smoke' Tobacco Counter-marketing Campaigns." First Look Report 9. Washington, DC. June 2002B.
- Farrelly, Matthew C., J Niederdeppe, J Yarsevich. "Youth Tobacco Prevention Mass Media Campaigns: Past, Present, Future Directions." <u>Tobacco Control</u>. 2003; 12(Sup 1): i35-i47.
- Fletcher, Robert H., Suzanne W. Fletcher, and Edward H Wagner. "Clinical Epidemiology: The Essentials." 3rd ed. Baltimore: Williams and Wilkins; 1996.
- Flynn, Brian, John Worden, Roger Secker-Walker, Gary Badger, Berta Gellar. "Cigarette Smoking Prevention Effects of Mass Media and School Interventions Targeted to Gender and Age Groups." <u>Journal of Health Education</u>. 1995; 26(2) Supp.: 545-551.
- Goldmann, Lisa K. and Stanton A. Glantz. "Evaluation of Anti-smoking Advertising Campaigns." <u>JAMA</u>. 1998; 279(10): 772-777.
- Hannon, Sandra Wills. "Background and Principles of an African American Targeted National Anti-Drug Campaign." Journal of Public Health Management & Practice. 2000; 6(3): 65-71.
- Hill, David. "Why We Should Tackle Adult Smoking First." <u>Tobacco Control</u>. 1999; 8: 333-335.

- Hill, David, Simon Chapmann and Robert Donovan. "The Return of Scare Tactics." <u>Tobacco Control</u>. 1998; 7: 5-8.
- Ling, Pamela M., and Stanton A Glantz. "Using Tobacco Industry Marketing Research to Design More Effective Tobacco-Control Campaigns." <u>JAMA</u>. 2002; 287(22): 2983-2989.
- Marín, Gerardo, Barbara V. Marín, Eliseo J. Pérez-Stable, Fabio Sabogal and Regina Otero-Sabogal. "Changes in Information as a Function of a Culturally Appropriate Smoking Cessation Community Intervention for Hispanics." <u>American Journal of Community Psychology</u>. 1990; 18(6): 847-864.
- McGloin, Tim and Steven Burritt. "Getting the Message: An Assessment of Effective Themes and Styles for Anti-Tobacco Media Messages in North Carolina." Report to the North Carolina Prevention Control Branch. 2002: 1-19.
- McKenna, Jeffrey W. and Kymber N. Williams. "Crafting Effective Tobacco Counter-Advertisements: Lessons from a Failed Campaign at Teenagers." <u>Public Health Reports</u>. 1993; 108(Supp.1): 85-90.
- Montazeri, Ali and James McEwen. "Effective Communication: Perception of Two Antismoking Advertisements." Patient Education and Counselling. 1997; 30: 29-35.
- Murphy, Rebecca L. "Development of a Low-Budget Tobacco Prevention Media Campaign." <u>Journal of Public Health Management and Practice</u>. 2000; 6(3): 45-48.
- Pechmann, Cornelia, Guangzhi Zhao, Marvin E. Goldberg, and Ellen Thomas Reibling. "What to Convey in Anti-Smoking Advertisements for Adolescents: The Use of Protection Motivation Theory to Identify Effective Message Theme." Journal of Marketing. 2003; 67: 1-18.
- Pechmann, Cornelia and Ellen Thomas Reibling. "Anti-Smoking Advertising Campaigns Targeting Youth: Case Studies from USA and Canada." <u>Tobacco Control</u>. 2000A; 9(Supplement 11): ii18-ii31.
- Pechmann, Cornelia and Ellen Thomas Reibling. "Planning an Effective Anti-Smoking Mass Media Campaign Targeting Adolescents." Journal of Public Health Management & Practice. 2000B; 6(3): 80-94.
- Pechmann, Cornelia and Goldberg. "Evaluation of Ad Strategies for Preventing Youth Tobacco Use." Found on the web:

 <u>www.trdrp.org/PageGrantPrintPage.asp?grant_id=407</u>

 Last visited on 12/1/03
- Peracchio, Laura A. and David Luna. "The Development of an Advertising Campaign to Discourage Smoking Initiation Among Children and Youth." <u>Journal of Advertising</u>. 1998; 27(3): 49-57.
- Ramirez, Amelie G, Kipling J. Gallion, Renato Espinoza, Alfred McAlister, and Patricia Chalela. "Developing a Media and School-based Program for Substance Abuse Prevention Among Hispanic Youth: A case Study of Mirame!/Look at Me!" Health Education and Behavior. 1997; October: 603-612.
- Ramirez, Amelie G, Patricia Chalela and Daniel T. Presswood. "Developing a Theory-Based Anti-Drug Communication Campaign for Hispanic Children and Parents." <u>Journal of Public Health Management & Practice</u>. 2000; 6(3): 72-79.
- Riester, Tim and Mirja Linton. "Designing an Effective Counter-advertising Campaign Arizona." Cancer. 1998; 83(12) Supp.: 2746-2751.
- Schar, Elizabeth, Karen Gutierrez, Rebecca Murphy. "Lessons Learned from Youth Tobacco Use Prevention Media Campaigns n Nine Countries." Unpublished, 2003.

- Sowden, AJ, Arblaster L. "Mass Media Interventions for Preventing Smoking in Young People (Cochrane Review)." The Cochrane Library. Issue 3, 2003.
- Soames-Job, R.F. "Effective and Ineffective Use of Fear in Health Promotion Campaigns." American Journal of Public Health. 1988; 78(2): 163-167.
- The Stafford Institute. "Teen Responses to Radio Spots, Poster and Logo Concepts." North Carolina HWTFC Teen Tobacco Prevention Media Testing Focus Group Findings Report. 2003: 1-48.
- Thrasher, James F., Jeffery Niederdeppe, Matthew Farrelly, Kevin Davis, Kurt M. Ribisl, M. Lyndon Haviland. "The Impact of Anti-Tobacco Industry Prevention Messages in Tobacco Producing Regions: Evidence from the US truth™ Campaign." Unpublished Manuscript, 2003.
- Wakefield, Melanie, Brian Flay, Mark Nichter, and Gary Giovino. "Effects of Anti-Smoking Advertising on Youth Smoking: A Review." <u>Journal of Health Communication</u>. 2003A; 8: 229-247.
- Wakefield, Melanie, R. Durrant, Y. Terry-McElrath, E. Ruel, Gl Balch, S. Anderson, G. Szczypka, S. Emery, B. Flay. "Appraisal of Anti-Smoking Advertising by Youth at Risk for Regular Smoking: A Comparative Study in the United States, Australia and Britain." Tobacco Control. 2003B; 12(3): 82-87.
- White, V, N Tan, M Wakefield, D Hill. "Do Adult Focused Anti-smoking Campaigns Have an Impact on Adolescents? The Case of Australian National Tobacco Campaign."

 <u>Tobacco Control</u>. 2003; 12 (Suppl 2): ii23-ii29.
- Worden, John K, Brian S Flynn, Laura J. Solomon, Roger H. Secker-Walker, Gary J. Badger, and Joseph H. Carpenter. "Using Mass Media to Prevent Cigarette Smoking Among Adolescent Girls." Health Education Quarterly. 1996; Nov.: 453-468.

12/19/03

Table 1: Search Engines

Medline
ABI Informed Global
Business Source Elite
Expanded Academic Index
CIOS
Academic Search
MasterFILE Premier

Table 2: Search Term Synonyms

"Countermarketing"

"Counter-advertising"

"Anti-smoking"

"Smoking cessation"

"Health Communication"

"Tobacco prevention"

"Mass Media"

"Television Advertisement"

"Media"

"Adolescent"

"Adolescence"

"Youth"

"Teenager"

"Teen"

"Children"

"Ethnic Group"

"African American"

"Black"

"Minority"

"Hispanic"

"Latino"

"Native American"

"American Indian"

"Women"

"Girl"

Table 3: Critical Appraisals of Selected Studies

Study	Study Type	Advantages	Limitations
Goldman and Glantz, 1998	Focus group	Large number of focus groups (186)	No description of focus group methodology
		Large number of participants (~1500)	No outcome measures
		Large number of advertisements (118)	No exact number of children
			No means to determine absence of bias
			No data on ethnic group/sex/smoking status
			Unknown reward for participation
			Advertisements not tested for consistency
McGloin and Burritt, 2002	Focus group	Manageable number of Focus Groups (10)	No data on intention to change behavior
		Mix of ethnic group and gender	Unknown session length
		Audio taped/trained moderator	Only "at-risk" population (experimenters/smokers)
		Acceptable reward for participation (\$20)	Advertisements not tested for consistency
		60 commercials	
		91 participants (~9 per group)	
		Standardized and validated focus group methodology	
		Representative sample for age	
		Outcome measures = stop and think	
McKenna and Williams, 1993	Focus group	Representative sample for age	No description of focus group methodology
			Unknown number of focus group participants
			Possible moderator bias
			Unknown outcome measures
			No data on intention to change behavior
			No commercials used
			Unknown reward for participation
i			Old study - may not represent current trends

Study	Study Type	Advantages	Limitations
Murphy, 2000	Focus group	Large sample size (285)	No description of focus group methodology
		Mix of smoking status/age/gender/income	Possible moderator bias
Large number of		Large number of commercials (35)	Unknown reward for participation
	Outcome measure = intention to change behavior		"Convenience sample" (?Selection bias)
		Smaller number of focus groups (8)	
		Included emotional tone and theme data	
Peracchio and Luna, 1998	Focus group	Standardized and validated focus group methodology	Old study - may not represent current trends
		Mix of gender/smoking status/income/ ethnic group/age	No questions on specific themes
		Audio taped/trained moderator	·
		Smaller number of focus groups (20)	
		Reasonable number of participants/group (5-6)	
		Systematic, validated analysis	
		Reasonable length (50 min)	
		Outcome measure = perceived effectiveness	
Reister and Linton, 1998	Focus group		No description of focus group methodology
			Unknown number of focus group participants
			Possible moderator bias
			Unknown outcome measures
			No data on intention to change behavior
			No commercials used
			Unknown reward for participation
			Old study - may not represent current trends
			Limited to themes
Stafford Report, 2003	Focus group	Standardized and validated focus group methodology	No data on intention to change behavior
		Smaller number of focus groups (12)	Unknown reward for participation
		Mix of age/smoking status/ethnic group	Radio ads - not television
		Statewide sample	Advertisements not tested for consistency
		Outcome measure = perceived effectiveness	Limited number of commercials (11)
Study	Study Type	Advantages	Limitations

Biener, 2002	Cross-sectional study	Trained coders	No validated outcome measure
		Statewide survey	No data on intention to change behavior
		High response rate (~60%)	Categorized by ad campaign, not theme
		Large sample size (733)	Advertisements not tested for consistency
		Outcome measure = recall and perceived effectiveness	Unknown amount of exposure
		Mix of smoking status/age/gender	Unknown mix of ethnic groups/income level
Biener et al, 2003 (Unpub)	Cross-sectional study	Large sample size (1,606)	No validated outcome measure
		High response rate (~58%)	Limited to population with phones
		Outcome measure = recall and perceived effectiveness	No data on intention to change behavior
		Mix of smoking status/age/gender	? Generalizability outside state
		Advertisements tested for consistency	Limited number of commercials (8)
		Statewide survey	Unknown mix of ethnic groups/income level
Farrelly et al, 2002	Cross-sectional study	Over-sampled African Americans/Hisp/Asians	No specific categorization of theme
		National random sample	Advertisements not tested for consistency
		High response rate (~52%)	No validated outcome measure
		Outcome measure = recall and intention to change	Limited to population with phones
		Large sample size (6897)	
		Mix of ethnic group/gender/income level/smoking status	
Montazeri and McEwen, 1997	Cross-sectional study	Random selection of subjects	Limited number of commercials (2)
		Large sample size (264)	No controls
			No data on intention to change behavior
			No validated outcome measure
			Limited to emotional tone
			Advertisements not tested for consistency
			Old study - may not represent current trends

Study	Study Type	Advantages	Limitations
Pechmann and Goldberg, Quasi-experimental cross-sectional design 1998		Mix of age/ethnic group/gender	Unknown outcome measures
1330		Advertisements tested for consistency	No data on change of behavior
		Outcome measure = intention to change behavior	No validated outcome measure
		Large Sample Size (1,658)	Limited to themes
Pechmann et al, 2003	Quasi-experimental cross-sectional design	Advertisements tested for consistency	Only 56 advertisements tested
		Reasonable reward (\$1000 to schools)	Behavior change not measured
		Large sample size (1667)	No "real-world" conditions
		Mix of ethnic group and gender	No long-term follow-up
		Control group present	Limited to studying theme
		Validated survey tool/good outcome measures	
Wakefield et al, 2003	Quasi-experimental cross-sectional design	Large number of commercials (50)	No validated outcome measure Length of interview longer than recommended
		Mix of countries/gender/smoking status	(75 min)
		Large sample size (615)	Unknown reward for participation
		Advertisements tested for consistency	
		Standardized and validated survey methodology Outcome measure = recall and perceived effectiveness	

Table 4: Types of Theme

Variables	# Studies/Total	Effectiveness	Evidence
Addiction	2/11	Moderately effective	1) McGloin and Burritt, 2002
		,	2) Goldman & Glantz, 1998
Industry manipulation	8/11	Not effective	1) Pechmann et al, 2003
			2) Pechmann and Goldberg, 1998
		Mildly effective	1) McGloin and Burritt, 2002*
		Moderately effective	1) McKenna and Williams, 1993
		Highly effective	1) Goldman & Glantz, 1998
			2) Farrelly et al, 2002
			4) Biener, 2002
Serious Health	8/11	Not effective	1) Goldman & Glantz, 1998
Consequences of			2) McKenna and Williams, 1993
Tobacco Use			3) Pechmann and Goldberg, 1998
		Moderately effective	1) Pechmann et al, 2003
		Highly effective	1) McGloin and Burritt, 2002
			2) Biener, 2002
			3) Wakefield et al, 2003
			4) Biener et al, 2003
Refusal Skills	2/11	Not effective	1) Farrelly et al, 2002
		Highly effective	1) Pechmann et al, 2003
Secondhand smoke	4/11	Moderately effective	1) McGloin and Burritt, 2002
		Highly effective	1) Goldman & Glantz, 1998
			2) Pechmann et al, 2003
			3) Pechmann and Goldberg, 1998
Short-term	4/11	Not effective	1) Pechmann and Goldberg, 1998
consequences of		Mildly effective	1) Goldman & Glantz, 1998
tobacco use (health,		Moderately effective	1) Pechmann et al, 2003
cosmetic)			2) Peracchio and Luna, 1998
Negative social	3/11	Not effective	1) Goldman & Glantz, 1998
consequences (and		Highly effective	1) Pechmann et al, 2003
Social Norms)			2) Pechmann and Goldberg, 1998

^{*} Indicates that the study found industry manipulation effective if used with serious health consequences

Table 5: Types of Format

Variable	# Studies/Total	Effectiveness	Evidence
Testimonial	7/8	Highly effective	Biener, 2002
			Biener et al, 2003
			Wakefield et al, 2003
			Murphy, 2000
			McGloin and Burritt, 2002
Humor	4/8	Not effective	Schar et al, 2003
			Biener et al, 2003
			Murphy, 2000
			McGloin and Burritt, 2002
Graphic Images	4/8	Not effective	Murphy, 2000
		Highly effective	Schar et al, 2003
			Wakefield et al, 2003
			McGloin and Burritt, 2002
Factual	2/8	Moderately	
		effective	McGloin and Burritt, 2002
		Highly effective	McKenna and Williams, 1993
"Edgy," Youth Driven	2/8	Not effective	McGloin and Burritt, 2002
		Highly effective	Farrelly et al, 2002

Table 6: Types of Emotional Tone

Variables	# Studies/Total	Effectiveness	Evidence
Positive	5/9	Not effective	1) McGloin and Burritt, 2002
emotional tone (e.g. humor,			2) Montazeri and McEwen, 1997
inspiration)		Mildly effective	1) Biener, 2000
			2) Riester and Linton, 1998
			3) Murphy, 2000
Negative	7/9	Highly effective	1) McGloin and Burritt, 2002
emotional tone			2) Stafford Institute, 2003
(e.g. anger, outrage,			4) Wakefield et al, 2003
sadness,			5) Farrelly et al, 2002
shock, fear)			6) Montazeri and McEwen, 1997
			7) Murphy, 2000
			8) Biener et al, 2003
			9) Biener, 2002

Tobacco Prevention Evaluation Program UNC-CH Dept. of Family Medicine

Summary of the Expert Interviews

- I. Introduction
- II. Methodology
- III. Findings
 - a. Message Content
 - b. Message Format and Emotional Tone
 - c. Sub-Groups
 - d. Existing Tobacco Prevention Ads
 - e. Suggestions for a Successful North Carolina Campaign

Summary of Expert Interviews

I. Introduction

The second piece of this report is a summary of expert interviews that were conducted in order to clarify and expand information gleaned from the literature review. Interviews were conducted by members of the University of North Carolina at Chapel Hill Tobacco Prevention Evaluation Program (UNC-TPEP). For the first two sections of the interview, a number of categories describing message content/themes, formats, and emotional tone were identified in the literature. The first set of questions on the interview form explored the general effectiveness of a number of listed themes, their effectiveness by sub-group, as well as interviewees' opinions on contradictions in the literature addressing these topics. The second part focused on the issues of format and emotional tone, again probing for both the general effectiveness of each of a number of listed categories and their effectiveness by identified sub-groups. The third piece contained questions about existing youth-focused, anti-tobacco advertisements and how these might be used in North Carolina. Finally, interviewees were asked in the last section about their suggestions for making the North Carolina campaign as successful as possible.

II. Methodology

Subjects were chosen for this study in a number of ways. A list was made of influential researchers in the field of youth-focused tobacco prevention media campaigns, compiled from articles used in the literature review. A request for interviewee suggestions was sent to a number of people in the tobacco prevention field in the Triangle area. Finally, interviewees were asked for their suggestions of others to interview. In total, 15 people were identified for expert interviews and 10 were interviewed. Of these, nine were researchers in the field of youth-focused countermarketing campaigns (from North Carolina, California, Florida, Massachusetts, and the CDC), and one was a statewide expert on North Carolina media-based tobacco prevention programs for youth. Two additional countermarketing experts were consulted, though not formally interviewed.

After the interview forms were approved by the UNC School of Medicine Institutional Review Board and then pilot tested, a member of UNC-TPEP contacted interviewees by email to explain the project and invite participation into the study. Those who responded received a consent form and list of categories to be used for the questions on theme, format, and emotional tone. All but one interview (which was conducted in person) were conducted by telephone and taped with the interviewees' signed consent. Interviews lasted an average of one hour and were then transcribed. Notes from the interviews were analyzed by compiling interviewee data and searching for recurring ideas to use for the summary report.

III. Findings

A. Message Content

The content of messages is often referred to in the literature as "themes." A number of themes were identified as those most often studied or referred to in the literature. This list included serious health consequences of tobacco use, short-term (also called "cosmetic") consequences of tobacco use, secondhand smoke, industry manipulation, addiction, refusal skills, social norms, and social consequences. Interviewees were asked to give their opinions on which of the eight were the most and which were the least effective. They also had the option of choosing a combination of the eight listed or giving an answer not on the list. They were then asked on what basis they had made their choices - whether from their best guess, their own work experience, their interpretation of the literature, or some other method.

The three themes most often chosen as being among the most effective were serious health consequences, secondhand smoke, and industry manipulation. The short- term ("cosmetic") consequences of tobacco use, as well as social norms or social consequences, were those most often cited as being the least effective. Most interviewees referred to their own work or other studies they had read in making their choices.

In the interviews, as in the literature, there was some dissent about the most effective themes. This was because participants based their answers on a number of different studies. When participants were asked why they believed many studies had contradictory findings, most cited one of six reasons. First, the studies used different *methodologies*. As participants pointed out, some studies used focus groups, others a laboratory setting, while others did testing in the field through broad, population-based surveys. The reason this would affect study results is tied to a second point, differing *outcome measures*. The way these two variables can combine to point to completely different results is shown by the following example: A focus group that tests a number of ads to see which are rated most highly by youth may find that certain themes test better – meaning youths like them more. Yet a population based survey that measures youths' confirmed awareness of ads with these same themes might find no corresponding change in smoking behavior or intent to smoke.

As a number of participants explained, the fact that a youth likes an ad does not necessarily mean it will change their behavior. Often it is the ads that youth do not like, those that "shake them up", which may have a deeper impact on actual behavior. As one interviewee put it, "What works for selling shoes isn't the same as what works for getting kids not to do something that is bad for them. Teens don't necessarily need to *like* or feel good about ads as long as the ads get them thinking and reach them on a deeper level." In the above example, the authors may report very different results based on their differing methods and measures.

A third reason listed for contradictions in the literature was the *variability in the ads tested*. Participants may have been responding to other features of the ads beyond themes, such as format or emotional tone (which will be discussed in the next section), or ad production quality. Two more related factors are that different ads are tested, and the "best" of certain categories may be compared with the "worst" of others, and ads taken out of the context of the broader campaign may not have the same effect. Finally, a couple interviewees suggested that the use of diverse samples could play a part. Perhaps youth in areas with high exposure to certain themes would experience "ad wear-out" and respond

more negatively to certain ads than youth in areas where those themes have not yet been used.

B. Message Format and Emotional Tone

Participants were asked to choose from the following list of formats/emotional tone those that they found to be most and least effective: personal testimonials, ads that provoke anger or outrage, ads that elicit fear, graphic images, humorous or silly ads, satirical ads, hopeful or inspirational ads, thought-provoking ads using facts or statistics, and "edgy" or shocking ads.

The two frequently cited as being most effective were personal, moving testimonials, and ads that evoked anger or outrage. One person specified that ads evoking anger/outrage should be only one part of a campaign, as they would wear out more easily. A few people also mentioned ads depicting graphic images, thought-provoking ads, and shocking or edgy ads as being particularly effective. There was a great deal of agreement that humorous or silly ads were generally ineffective, though one person said they might be done as a fun addition to a good campaign, "like a garnish." Ads that convey aspiration or hope (such as ads showing role models who do not smoke) were also agreed to be ineffective. The results of the interviews mirror those of the literature review in finding that ads with a negative emotional tone (sadness, anger, shock) were more effective than those with a positive emotional tone (such as humor or hope.)

An additional component of format assessed separately in the interviews was the type of persona most effective in youth-directed ads: actors, "real people", or cartoons. Most respondents noted that real people had proven most successful because they were more believable and better able to evoke emotions among audience. A few people noted that the difference between actors and "real people" would most often come into play in testimonial ads. Although many participants also agreed that cartoons were generally ineffective, the point was made that the execution of the ad was key. (Using real people will not guarantee a successful ad, nor are all cartoon ads poorly done.)

C. Sub-Groups

Interviewees were asked whether they believed certain themes, formats, or emotional tones were more effective within specific sub-groups by gender, age, ethnicity, or smoking status. No significant evidence was presented for differences in the above by gender. The issue of age similarly elicited few comments, save for those noting that sophisticated or complex themes might be difficult for younger children.

Responses to the issue of ethnicity were more varied. Many interviewees believed that "teens are teens" and that there are consequently no differences in ad effectiveness by ethnic group. They noted that a good ad should be equally effective with all groups, though some specified that American Indian youth may be an exception to this rule because of their underrepresentation in the media and unique history with tobacco. One person clarified that while ads should not target groups, they should be tested with all ethnic groups for "damage control." The same person suggested using youth of multiple ethnicities in all ads, as the TruthTM campaign has attempted to do. Two people believed that family-themed ads would be more effective with African American and Latino youth, particularly the idea of setting a good example for younger siblings.

One issue that arose regarding effective themes for youth by smoking status was that smokers might respond more negatively to social norms or social consequence ads. This is often because the kids in those ads are not "like them."

D. Existing Tobacco Prevention Ads

Participants were asked whether they were familiar with any existing tobacco prevention or cessation ads directed to youth that they believed would be effective in North Carolina. The ads most commonly recommended were those using personal testimonials such as the Pam Laffin series and Rick ads from Massachusetts, as well as a number of ads from the Florida Truth™ campaign.

Interviewees were then asked, if existing ads are used for the North Carolina campaign, whether they should be tagged to make the ad specific to this state. Of the nine people who responded to this question, six thought a tag should be added; two did not; and one said the decision to use a tag would depend on a number of factors. Those who believed that existing ads should be tagged suggested that the tag include information about relevant websites or local health resources like a quit line. A couple noted that if the campaign were branded, this would be the place to show the NC brand.

The next area asked whether there were an ideal number of ads to use in a successful campaign. The question gave the example: "If we found six ads to be particularly effective with youth, how many of these should be used in the campaign?" Most respondents said there was not a specific formula for the number of ads to use, though suggested that two to four be used in each flight and then rotated with new ads to avoid "wear out."

E. Suggestions for a Successful North Carolina Campaign

Interviewees were asked what type of campaign they believed would be most effective in North Carolina. All of the participants had different visions of the ideal campaign for this state. Many reiterated their positions on the best themes, formats, and tones to use, but a few gave additional suggestions, which are listed below.

- 1. Use existing ads rather than creating new ones.
- 2. Spend as much as possible on media buys in order to increase the intensity of the campaign.
- 3. Utilize minority stations, which are cheaper and heavily watched.
- 4. Two people suggested that the campaign focus on promoting tobacco free policies in North Carolina, especially in schools. They noted that such a campaign would encompass other issues, such as cessation and health consequences. The campaign could promote the passing of new policies and enforcement of existing ones.

Another question asked about the issue of targeting: Because the budget of the North Carolina media campaign will be limited, do you believe it would be more efficient to target the campaign to certain groups, for example by age or smoking status? Of the seven people who answered this question, three did not believe that the campaign should target a specific group, as they had found that most youth responded to the same types of ads. Several people suggested focusing on "at-risk" youth – those who were open to smoking. As one participant said, "You won't get an effect by preaching to the choir." Some campaigns, such as perhaps Philip Morris's "Think. Don't Smoke", may resonate more with youth who do not

smoke and are not open to smoking; thus they do not affect youth smoking rates. Two suggested targeting youth aged 13-15, stating that younger kids tend to be anti-tobacco already and it may be too late to reach older youth with ads.

The final interview question concerned the issue of industry-themed ads. Because both the literature and interviews pointed to industry manipulation as an effective theme, and because North Carolina's status as a tobacco-producing state makes this theme a potential political hot topic, we asked experts whether they believed an industry theme could be effective with North Carolina youth. Of the seven people who expressed clear opinions on this issue, two said they did not think industry-themed ads would affect the smoking behavior of youth in this state. The other five believed these ads would work in North Carolina, though specified that they should be used in conjunction with other types of ads and themes. The point was made both here and in other sections of the interview that it might depend on which specific industry-themed ads were chosen. Ads should clearly target executives rather than local workers. As one participant noted: "I don't think the industry is a friend to farmers." Some ads that contain more subtle, or secondary, industry manipulation themes may be more politically palatable in North Carolina.

Tobacco Prevention Evaluation Program UNC-CH Dept. of Family Medicine

Summary of the Local Expert/Stakeholder Interviews

- IV. Introduction
- V. Methodology
- VI. Findings
 - a. Vision of Ideal Campaign
 - b. How to Address the Role of Tobacco Production in North Carolina
 - c. Priority Populations
 - d. Coordination and Buy-in from Stakeholders and Youth

Summary of Local Expert/Stakeholder Interviews

If you get adult leaders and youth buy-in from the beginning, coordination after that should be easy

I. Introduction

The third piece of this report is a continuation of the interview section, but with local expert/stakeholders. A separate form was used for the stakeholder interviews, which were also conducted by members of the University of North Carolina at Chapel Hill Tobacco Prevention Evaluation Program (UNC-TPEP). It included questions on interviewees' views on how to create an ideal youth-focused media campaign for North Carolina, how to deal with the issue of tobacco production in the state, how to best reach youth from priority populations (various ethnic groups), and how to get coordination and buy-in from stakeholders, youth, and local tobacco prevention programs and coalitions.

II. Methodology

Subjects were chosen for this study to represent a number of categories: HWTFC community/schools grantees from across the state, people who work in tobacco prevention/cessation programs with youth – especially from priority population groups, and representatives from the school system. Thirteen people were identified and interviewed.

After receiving approval from the UNC School of Medicine Institutional Review Board and pilot testing the interview form, a member of UNC-TPEP contacted interviewees by email or telephone to explain the project and invite participation into the study. All interviews were conducted by telephone and taped with the interviewees' signed consent. Interviews lasted an average of half an hour and were then transcribed. Notes from the interviews were analyzed by compiling interviewee data and searching for recurring themes to use for the summary report.

III. Findings

A. Vision of Ideal Campaign

Participants were first asked to describe what kind of campaign they believed would be effective in encouraging North Carolina youth not to smoke. Answers varied widely. Suggestions ranged from airing personal stories with strong emotional content to focusing on "TruthTM-style" ads with a theme of industry manipulation. A few people said that the ideal campaign would include messages created with youth input.

B. How to Address the Role of Tobacco Production in North Carolina

Because the issue of industry manipulation-themed ads is a contentious one, we asked local stakeholders their thoughts about how tobacco production should be addressed in youth-focused tobacco prevention ads. Participants were asked whether and how they believed the role of tobacco production should be taken into account when designing an effective countermarketing media campaign, and whether they believed industry-themed ads could be effective with North Carolina youth. Three of the thirteen participants did not think industry-themed ads would be appropriate in this state − one because of political implications, one because of sensitivity to youth whose families work in tobacco, and one because kids "don't care." A fourth said that while ads should "not be sugarcoated", perhaps industry-themed ads like those in the Truth™ campaign would not fit "our southern hospitality culture like testimonials do." This same person also expressed that "teens don't really understand that North Carolina being a tobacco-growing state is a big deal." Another said he believed that industry-themed ads could be effective, though it would be difficult to do them well. He said it would be integral to distinguish between the industry and local farmers, so that "kids and their families wouldn't feel bad."

One participant recommended tying industry themes to the theme of addiction by identifying what is in manufactured tobacco and how it has been enhanced by the industry to create addiction. He said this approach might make it possible to "slide under the restrictions" imposed by the government. Six participants thought that TruthTM-style industry-themed ads would be effective with North Carolina youth, though many noted that the ads might need to be done differently here to avoid political controversy and offending those who make their living from tobacco in the state.

C. Priority Populations

When asked about how the media campaign, or a specific ad, could be best designed to reach African American, Latino, and/or American Indian youth, participants gave a wide variety of responses. Many people suggested that focus groups be conducted with youth from these communities to get their opinions on how to best design the campaign. The suggestion was also made to use real youth from these communities in ads, rather than actors. Most people agreed that ads should show diverse youth.

One person who is currently working with tobacco prevention among African American youth recommended addressing the issue of the increase in tobacco use among African American male teens, and the simultaneous increase in lung cancer rates among African American male adults. She suggested a second theme focusing on how youth could help their loved ones quit, since the concepts of family and community are particularly powerful for African American youth.

A stakeholder in the Latino community noted that ads and materials should be in Spanish and should focus on tobacco as a social justice issue because of the industry's targeting of minorities. She also proposed that the issues of acculturation and Latino migrant workers' part in tobacco farming be addressed.

A suggestion made by a prominent member of the American Indian community was to use small icons in ads that American Indian youth would easily identify. He said that while the campaign could use more obvious signs such as tribal music or someone who "looks Indian", it might be better to do something less stereotypical such as having a youth in an ad

"wear a [UNC] Pembroke cap so that American Indian youth would know that the kid is one of them but no kids would feel excluded." He recommended focusing on the distinction between ceremonial and commercial tobacco and perhaps using community members in ads or local North Carolina heroes who happened to be from populations of color. He also believed that the theme of addiction would be appropriate for American Indian youth because it does not contradict the idea of tribal sovereignty.

D. Coordination and Buy-In from Stakeholders and Youth

Key questions for the stakeholders assessed their thoughts on how to get "buy-in" (or support, involvement) from local stakeholders such as themselves, as well as from youth, and how the media campaign could best coordinate with local tobacco prevention programs and coalitions. This was the one area in both the expert and stakeholder interviews in which responses were almost unanimous. People want their voices, and those of the youth in their programs, to be heard. They want to have creative input into the media campaign from the beginning. They want focus groups to be conducted both with local experts like themselves, and more important, with their youth. They also want there to be a forum for communication with the media vendor, perhaps through email, telephone, or even regular meetings.

The following comments illustrate these sentiments:

- "Invite us to the table from the beginning. Make sure we are represented, so there is 'lay' as well as expert diversity and input."
- "Have us participate in the planning meetings and the creative process. Many of us have done research and know what the youth have said. But, youth should be asked, too, and their opinions should be listened to over the adults."
- "Youth involvement is the most critical piece. They must feel like it's their campaign.
 Get youth involved from the target audience not just the kids from organized groups.
 Find the at-risk kids. Really get out there where the kids are."
- "Get youth input up front. Don't develop the ads and then ask. Have them help to develop the ads so they feel ownership. You won't get buy-in after the fact. Ask the folks from the media vendor to come to our meetings."
- "If you get adult leaders and youth buy-in from the beginning, coordination after that should be easy. It would be hard for me to promote a campaign I didn't think was effective, but if we feel ownership in the campaign, we will promote it."
- "Develop relationships with us and do local events, like a kickoff for the campaign. Give us updates on how things are going. Promotional items are also a good idea."

Tobacco Prevention Evaluation Program UNC-CH Dept. of Family Medicine

Appendices

VII. Appendix I: Expert Interview Form

VIII. Appendix II: Stakeholder Interview Form

Appendix I: EXPERT INTERVIEW FORM

Interview SubjectAffiliation	Date// Category
Thank you so much for agreeing to be interviewed for our prour previous conversation), the University of North Carolina has been contracted to provide information to be used in the (primarily using television) aimed at preventing tobacco use conducting an extensive literature review on youth-focused the are conducting interviews with experts in the field to clarify a literature. There are four parts to this interview. The first part themes to use in tobacco prevention and cessation ads. I will theme effectiveness by gender, age, ethnicity, and smoking emotional tone of ads, again which you find to be effective of differs by the sub-groups I just listed. In the third part, I will a specific advertisements or campaigns that you are familiar we effective. Finally, I will ask you a couple questions specificate campaign. The interview should take approximately one hour information you provide is used in a future publication, we we explicit consent. Do you have any questions before I begin?	Tobacco Prevention Evaluation Program e creation of a statewide media campaign among North Carolina youth. After tobacco prevention media campaigns, we and supplement our findings from the rt will focus on effective and ineffective all also be asking you about differences in status. The second part will focus on the rt ineffective, and whether effectiveness ask you for your recommendations of any with that you think are particularly ally related to the North Carolina are and will be taped. If any of the rould not use your name without your
THEMES – EFFECTIVENESS	
1. This first section will focus on themes. I am going to react tobacco prevention and cessation messages directed toward which of these you believe to be the most and which are the selections, you will have the opportunity to elaborate on why or ineffective.	d youth. Please tell me, in your opinion, least effective. After you make your
Long-term consequences of tobacco use (e.g. emphy Short-term consequences of tobacco use (e.g. smell, Social norms (Smoking unattractive; not everyone small Industry manipulation (Tobacco company marketing sequence) Refusal skills (Ads show how you can refuse cigarette Secondhand smoke (Stresses the dangers of second Addiction (Ads focus on how smoking can control you Social consequences (e.g. rejection from opposite seguences) A combination of the above (list	stained teeth) nokes) strategies and industry es) hand smoke to others) ur life) x, etc.)
2. Please tell me on what basis you made these choices; fo on your best guess, your own work experience, studies you	

THEMES - SUBGROUPS

EMOTIONAL TONE - EFFECTIVENESS

6. For the second part of the interview, I will be focusing on the emotional tone of ads. I am going to read you a list of different styles, or emotional tones, that are commonly used in tobacco prevention and cessation messages directed toward youth. Please tell me, in your opinion, which of these types of ads you believe to be the most effective and which are the least effective.

1	\sim	/1	$^{\circ}$	10	1
1	2	1	9	/U	1.5

Those that are humorous or silly (e.g. ad where boy coughs a lung up at dinner table) Those that employ satire (e.g. ad where youth thanks tobacco industry execs) Those that convey aspiration or hope (e.g. ads that show role models, like ad with women's soccer team) Those that depict graphic images (e.g. ads that show effects of tobacco on a smoker's lung) Those that provoke anger or outrage (e.g. ads that describe tobacco industry's deceptive marketing) Those showing personal, moving testimonials (e.g. ads where someone describes losing a loved one to effects of tobacco use) Those that are thought-provoking (e.g. ads that give statistics about number of people who die from tobacco use) Those that are shocking or edgy (e.g. ad that shows body bags piled up) Those that elicit fear (e.g. ads that show people suffering from the consequences of tobacco use)
A combination of the above (list) Other ()
 7. As before, please tell me on what basis you made these choices EMOTIONAL TONE – SUBGROUPS 8. Do you believe that there are differences in style (or emotional tone) effectiveness by
Gender? Yes No Not sure
Age? Yes Not sure Ethnic groups? No Not sure
Smoking status? Yes No Not sure
9. Please describe these differences for each group, and on what evidence you base your opinion.
Gender:
Age group:
Ethnic group:
Smoking status:

10.	In your experience	e, which type of ads are the most effective, those that use	
	_ Cartoons		
	_ Actors		
	_ "Real people"	and why?	

ADS/CAMPAIGNS

- 11. For the third section, we will talk about existing tobacco prevention ads. If you are familiar with any existing tobacco prevention/cessation ads directed to youth, which specific ones do you believe are the most effective?
- 12. Do you believe that any of these ads would be particularly effective here in NC? Why?
- 13. If existing ads are used here, do you believe that a tag should be added to make the ad specific to North Carolina?
- 14. (IF SO) What kind of information should this tag include?
- 15. What do you think would be the ideal number of ads to use in a media campaign? For example, if we found six ads to be particularly effective with youth, how many of these should be used in the campaign? (PROBE FOR ISSUE OF DOSE AS WELL)
- 16. Finally, I have a few questions specific to the North Carolina campaign. Are you familiar with any state campaigns that you think would serve as good examples for North Carolina in planning its own campaign?
- 17. Please describe what type of campaign you believe would be most effective here in NC.
- 18. Because the budget of the North Carolina media campaign will be limited, do you believe it would be more efficient to target the campaign to certain groups, for example by age or smoking status?
- 19. (IF ISSUE OF INDUSTRY MANIPULATION NOT ALREADY ADDRESSED IN ABOVE ANSWERS) One small focus group study here in North Carolina showed that the theme of industry manipulation was not popular with youth participants, yet some researchers have hypothesized that the issue of local tobacco production is irrelevant to the components of an effective campaign. Can you please comment on this?
- 20. Is there anything else you would like to add?
- 21. Is there anyone else you think we should talk to?

Thank you so much for your time. Your answers will assist us in our recommendations for planning an effective media campaign directed toward preventing and reducing tobacco use among North Carolina youth.

Appendix II: STAKEHOLDER INTERVIEW FORM

Interview Subject	Date//
Affiliation	Category

Thank you so much for agreeing to be interviewed for our project. As I (wrote in my email/stated in our previous conversation), the UNC Tobacco Prevention Evaluation Program has been contracted to provide information to be used in the creation of a statewide media campaign (primarily using television) aimed at preventing tobacco use among North Carolina youth. After conducting an extensive literature review on youth-focused tobacco prevention media campaigns, we are conducting interviews with local experts such as yourself to find out how our general findings can be applied specifically to a campaign for North Carolina. The interview should take approximately 15 to 20 minutes and will be taped. If any of the information you provide is used in a future publication, we would not use your name without your explicit consent. Do you have any questions before I begin?

- 1. Please describe what kind of campaign you think would be effective in convincing North Carolina youth not to use tobacco. What type of messages would this campaign include?
- Do you think there is anything special about the state of North Carolina (as compared to other states) that should be taken into account when designing a tobacco prevention media campaign for youth? (MAKE SURE TO CLARIFY YOUTH VS. ADULTS)
- 3. (IF NOT ADDRESSED IN PREVIOUS ANSWER) Should the role of tobacco production in North Carolina be taken into account when designing a media campaign to reduce tobacco use among youth?
- 4. (IF YES) How so?
- 5. How do you think a North Carolina media campaign, or a specific advertisement, could be best designed to reach (African American/Latino/Native American) youth with a message of tobacco prevention/cessation?
- 6. I now have a few questions for you about coordination and buy-in for the media campaign. First, what do you think is the best way to get buy-in from local stakeholders, such as yourself, for the state's media campaign?
- 7. What is the best way to get buy-in/involvement from youth for NC's media campaign?
- 8. How should NC's media campaign coordinate with local tobacco prevention programs/coalitions?
- 9. Is there anything else you would like to add?
- 10. Is there anyone else you think we should talk to?

Thank you so much for your time. Your answers will assist us in our recommendations for planning an effective media campaign directed toward preventing and reducing tobacco use among North Carolina youth.