Reducing Teen Tobacco Use in Vermont A Functional Analysis for Cultural Interventions Data Collected November 2012

Presented To: Vermont Department of Health



RESCUE SOCIAL CHANGE GROUP

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Executive Summary

According to the most recent Youth Risk Behavior Survey in 2011, Vermont (VT) has a relatively low high school smoking prevalence of 13.3%, compared to the nationwide prevalence of 18.1% (CDC, 2011). As tobacco use prevails as the primary cause of preventable death and diseases in the US, it is pertinent for VT to continue its efforts to reduce youth tobacco use.

However, VT now faces the unique challenge of reducing teen tobacco use within a very small segment of the youth population. To address this challenge, the Vermont Department of Health (VDH) contracted Rescue Social Change Group (Rescue SCG) to conduct its proprietary Functional Analysis for Cultural Interventions (FACI) study. The FACI study was specifically designed to understand the identities of teens who still use tobacco and why they continue to do so. The ultimate goal of this study is to inform and guide future tobacco prevention efforts in VT to ensure that limited resources are efficiently targeted to teens who are most at-risk in an effective manner. Specifically, the study was designed to address the following objectives:

- Identify VT teens who are at risk for tobacco use and the personal characteristics that increase risk.
- Understand how the identified characteristics increase risk of tobacco use among VT teens.
- Identify characteristics of tobacco prevention TV ads that increase or decrease their effectiveness.

To achieve the above-stated research objectives, Rescue SCG researchers conducted eight focus groups with 82 high school students in November 2012. These focus groups were conducted at Burlington, Enosburg, and Black River High Schools as well as Hannaford Career Center.

58% of focus group participants had used tobacco at some point in their life, with 39% reporting tobacco use in the past 30 days. Additionally, 43.4% of respondents reported that more than half of their friends used tobacco products in the last 30 days. Gender was approximately equally distributed. The majority of participants were White at 87.7%, and the remaining participants were Asian (2.5%), Black (2.5%), American Indian/Alaskan (2.5%), and Other (2.5%). As the target sample was high school students, the age range was 13 to 19 with 16- and 17-year olds accounting for more than 50% of the respondents.

Youth Tobacco Prevention Secondary Research

Previous research indicates that some of the most significant personality predictors of adolescent tobacco use are risk-taking, rebelliousness, sensation seeking, and novelty seeking (Griffin, Botvin, Doyle, Diaz, & Epstein, 1999; Hu, Muthén, Schaffran, Griesler, & Kandel, 2008; Stanton, Li, Cottrell, & Kaljee, 2001). Additionally, a large body of academic research indicates that there is a significant association between depression and smoking, with some research suggesting that the link between depression and smoking



initiation stems from increased susceptibility to peer smoking influence (Patton et al., 1998).

In addition to psychological predictors, research has repeatedly identified peer influence to be one of the largest predictors of teen tobacco use (Wang, Fitzhugh, Westerfield, & Eddy, 1995; Robinson, Murray, & Alfano, 2006; Brook, Pahl, & Ning, 2006). During adolescence, when parental influence decreases and peer influence increases, youth are psychologically vulnerable, self-conscious, and concerned about personal appearances and "fitting in" (Steinberg & Morris, 2011; Tanti, Stukas, Halloran, & Foddy, 2011; Konopka, 1991; Elkind & Bowen, 1979; Rosenberg, 1985). However, peer influence does not usually manifest in the traditional manner typically ascribed to "peer pressure." Research overwhelmingly suggests that peer pressures related to tobacco experimentation and initiations are largely not direct or coercive in style. Amongst peers, behaviors and attitudes held by influential members are likely to be replicated by others (Kniskern, Biglan, Lichtenstein, Ary, & Bavry, 1983; Urberg, Degirmencioglu, & Pilgrim, 1997; Sussman, et al., 1993). The act of tobacco use, then, can be perceived as simply an internally initiated behavior to identify or belong with the peer crowd rather than an on-the-spot response to a direct offer from a peer.

Although research has shown that mass media campaigns are an effective strategy for preventing youth tobacco use, the findings also stress the important role that message type, format, tone, and delivery play in campaign success, as well as the positive effect of age-targeted messaging, specifically among the youth population (Schar, Gutierrez, Murphy-Hoefer, & Nelson, 2006). While messages that focus on the health effects of smoking are consistently effective among youth, there is evidence that it is especially effective to present that information in new ways (Schar et al., 2006). For instance, several recent youth-targeted campaigns within the United States have employed messaging centered on the deceptive practices of the tobacco industry (Hersey et al., 2005). Among youth, exposure to counter-industry campaign messaging has been positively associated with changes in tobacco related attitudes, behavior, and future intentions to use tobacco (Farrelly et al., 2002; Farrelly, Davis, Haviland, Messeri, & Healton, 2005). Results from several studies of mass media campaigns involving tobacco industry messaging suggest that careful message testing must occur to prevent possible confusion and ensure that the message is well received by the target population (Schar et al., 2006)

There is consensus that successful ads must evoke emotion, and research suggests that negative emotions such as disgust, loss, sadness, or anger are more effective than positive emotion (Lang, Dhillon & Dong, 1995; Biener, 2000). Studies of past youth-targeted media campaigns also suggest that it is important for the campaign tone to avoid being preachy or authoritarian (Schar et al., 2006). Whether highlighting the deception of the tobacco industry activity or engaging adolescents on an emotional level, careful testing of the actors and the messaging featured in the ad is necessary to ensure that the format is not interfering with the message itself.



Qualitative Analysis: General Teen Tobacco Use

The perceived rates of tobacco used among teens in Vermont are relatively high. Many said that tobacco use had fallen out of style, but they frequently smoked because they were "bored". Participants perceived that the use of chew was highest in rural areas due to its popularity among males in these regions. Hookah use was described as a popular social activity among teens in Vermont. Many described hookah as healthier than smoking cigarettes, and felt their use was not frequent enough to be concerned about the health effects associated with hookah use. Although not as prevalent as cigarettes or chew, teens described a growing popularity of cigarillos and cigars with some frequency, mentioning flavored Swisher Sweets brand by name. Teens believed that e-cigarette usage was more prevalent among adults, particularly those trying to quit.

Qualitative Analysis: Peer Crowds & Perceived Tobacco Use

Peers, cultural identities, and social groups have repeatedly been associated with tobacco use in academic literature. Rescue SCG measures these factors using a comprehensive variable known as "peer crowds." A peer crowd is defined as the macro-level connections between peer groups with similar interests, lifestyles, influencers, and media consumption habits across geographic areas. In other words, while a teen has a local peer group that he/she socializes with, the teen and his/her peer group belong to a larger "peer crowd" that shares significant cultural similarities across cities and even states. It is critical to identify the peer crowds that define the teenage landscape in VT to understand the mechanics of peer interaction, and how cultural identities and social groups may be risk or protective factors in regards to tobacco use. Additionally, identification of the peer crowds most at risk for tobacco use is critical to developing and/or maintaining an effective tobacco prevention strategy, especially in VT where such a small fraction of teens (13.3%) use tobacco (CDC, 2011).

Rescue SCG researchers identified 5 teen peer crowds and estimated prevalence of tobacco use based on focus group activities as summarized below:

- 1. Country (Cowboys) Perceived to be the largest peer crowd, these youth enjoy riding all-terrain four-wheelers, going "muddin'" in pick-up trucks, and are passionate about hunting. This group is associated with high levels of cigarette and chew/dip use, with individuals often co-using both products.
- 2. Mainstream– Representing the norm, these are average teenagers that do not stand out visually compared to some of the other more distinct peer crowds. This group is ranked low on the tobacco use risk scale because they are perceived to not want to get in trouble with their parents or school for smoking. They are also less concerned about their social image.
- 3. Preppy This group is interested in mainstream pop culture and athletics. Tobacco use among the Preppy peer crowd is perceived to be low because athletes belong to this crowd and because it is



- not considered "cool" for preppy teens to smoke. Chewing tobacco use is perceived to be especially low among preppy teens.
- 4. Alternative (Scene, Hipster, Goth) The Alternative group is a small group in VT. Scene youth are influenced by skateboarding trends and perceived as approachable, whereas Hipsters are an older generation of Scene youth who often project an attitude of apathy. On the other hand, Goth teens are more concerned with dressing in black and projecting an image of depression and noticeably smaller in size than the other Alternative groups in VT. Scene and Hipster youth are perceived to have higher rates of smoking.
- 5. Hip Hop (Flashy and Hard) Hip Hop is the most rare of groups in VT and are often called "gangstas" by other participants. Flashy Hip Hop taps more into current pop culture for its look, while Hard Hip Hop associates with dark, often fatalistic imagery, like selling drugs and participating in street violence. The Hip Hop group is perceived to have higher rates of smoking relative to other peer crowds, second only to the Cowboy peer crowd.

Quantitative Analysis: Tobacco Use Risk Factors

Participants reported varying levels engagement with different forms of tobacco. When asked specifically about use of various tobacco products over the last 30 days, 25.6% had smoked cigarettes, 20.5% had smoked cigarillos, and 11.4% had used chewing tobacco. In terms of frequency of use, most participants who used tobacco reported using tobacco products between 1 and 10 days out of the last 30. Cigarillos were the most popular choice for these occasional users with 87.5% of tobacco users smoking cigarillos between 1 and 10 days out of the last 30. A subset of participants also reported using tobacco between 26 and 30 days out of the last 30. Cigarettes (35%) and chewing tobacco (33%) were the most popular choices for these daily users.

Quantitative Analysis: Ratings of Youth-Focused Tobacco Prevention Ads

Teens were shown twenty tobacco control ads, which they first rated quantitatively and then discussed as a group. Quantitative data was sourced from focus group exercises that were designed to evaluate teens' perceptions of specific ads and the facets of effective ads. Specifically, quantitative data was analyzed to identify prevailing ad themes, ad trends, and ad concepts that could be leveraged in future campaigns.

Ads were included from Vermont's OVX.org campaign, American Legacy Foundation's truth® campaign, and a variety of other state/local health department's campaigns. The most effective ads included two that addressed the hard-hitting negative health effects of tobacco use (i.e., CDC's Terri Tips, NYC Health's Reverse the Damage) and two that addressed animal testing in the tobacco industry (i.e., ydouthink's "Animal Testing Booth" and ydouthink's "Animal Testing Monologue"). Two truth® campaigns, "The Magical Amount" and "Fair Enough" and OVX.org's "Listen to Your Gut" were rated the lowest in effectiveness by more than three quarters of participants.



Further analysis of the response data indicated that certain facets of the ads were related to ad effectiveness. Teens tended to rate ads higher in effectiveness when they perceived the ads to be interesting, creative, serious, and having made them think. These four ad facets were present in all of the ads rated as most effective in the current study. Producing more ads and other strategies that combine these findings could result in even more highly effective messaging.

Qualitative Analysis: Discussion of Youth-Focused Tobacco Prevention Ads

While many of the ads shown in the focus groups received consistent evaluations, several received mixed reviews with common themes. Two ads, ydouthink's "Animal Testing Booth" and the ydouthink "Animal Testing Monologue (Female)," were evaluated positively and teens were compelled by the imagery of animal cruelty in both ads. However, teens generally disliked ydouthink's "Pet's Health," noting a lack of serious tone in the way the message was presented. Participants valued the serious tone of both the male and the female version of ydouthink's "Animal Testing Monologue". Participants also appreciated that this ad presented new information about tobacco, a finding that is consistent with a report sponsored by the CDC detailing recommendations for developing health communication campaigns (Schar et al., 2006). Teens expressed overt dislike for two truth® campaigns, "The Magical Amount" and "Fair Enough," describing the ads as ineffective for convincing smokers to quit (an evaluation consistent with quantitative findings). Participants described each of these ads as confusing, not appreciating or caring for the irony featured in the ads; in regards to content, participants noted that the "Magical Amount" got their attention but failed to convey pertinent information.

Implications & Discussion

The following implications were compiled based on a combined analysis of both qualitative and quantitative data sets to discover subtle insights pertinent to tobacco prevention in VT.

Reaching High Risk Teens in VT

- 1. Not all teens are at risk for tobacco use Unlike traditional segmentation approaches that focus on demographic data, psychographic segmentation based on identity, peer crowds, and lifestyles are necessary to truly understand teen tobacco use risk.
- 2. Country, Hip Hop, and Alternative cultural influence account for most tobacco use in VT Developing targeted interventions for youth who identify with Hip Hop, Alternative, and/or Country peer crowds would reach high risk teens more efficiently and effectively.

Improving The Effectiveness of Tobacco Prevention TV Ads

3. Authenticity is King – Ads that show "real teens" in the same peer crowd as the target group rejecting tobacco use for a good reason are likely to be effective to reduce tobacco use among



- youth who identify with the targeted peer crowd.
- 4. Thoughtful, Creative, Serious, and Interesting ads rule Programs should avoid humor-focused messages.
- 5. Reality ads are overwhelmingly preferred Reality ads seem to have the most potential to cause change, but authenticity will be critical for ads to be effective.
- 6. Reality strengthens many messages In a world where youth are bombarded with media messages, new and novel approaches stand out and get the message across.

Recommendations

Based on the need to reach a small fraction of teens who continue to use tobacco, the limited resources available to VDH for youth tobacco prevention campaigns, and the findings of this study, Rescue SCG provides 3 key recommendations:

1. Discontinue use of humor-based ads.

Teens reacted much more positively to ads that were perceived to be serious than ads that were humorous or ironic. Rescue SCG recommends that VDH shifts from the humorous approach of OVX.org's "Listen to Your Gut" ad to more serious ads focused on new information or new perspectives.

2. Utilize authentic, reality-based messaging.

Teens also highly prefer ads that depict authentic reactions from "real people" versus actors. This could be accomplished through "hidden camera" style ads like ydouthink's Animal Testing Booth, or ads that highlight a real life, authentic teen expressing his or her opinions, knowledge and/or values like ydouthink's Animal Testing Monologue.

3. Consider developing one or more campaigns that directly target high-risk peer crowds rather than a general "teen" campaign.

Study findings provide strong evidence that teen tobacco use is concentrated within certain teen peer crowds. VT teens that identify with the Country peer crowd were most likely to use tobacco, followed by teens in the Alternative and Hip Hop peer crowds. It is a common misconception that teen marketing campaigns can reach all teens equally. Because of the cultural differences between teen peer crowds, including interests, styles, slang terms, influences, music, etc., it is not possible to reach all teens with a single message. However, one or two campaigns targeting specific peer crowds can more authentically focus on the pockets of teens who continue to be at risk for tobacco use in VT.



Introduction

Vermont has a relatively low high school smoking prevalence of 13.3%, compared to the nationwide high school smoking prevalence of 18.1% (CDC, 2011). In 2013, The Vermont Tobacco Evaluation and Review Board (VTERB) defined goals to reduce smoking prevalence among youth grades 9-12 to 10% by 2020 (VTERB, 2013). While this goal addresses cigarette smoking prevalence, the overall tobacco use in Vermont among high schoolers is 20.4%, including cigarettes, cigarillos/cigars (12.8%) and oral tobacco (6.7%) (CDC, 2011)

To address this challenge, the Vermont Department of Health (VDH) contracted Rescue Social Change Group (Rescue SCG) to conduct its proprietary Functional Analysis for Cultural Interventions (FACI) study. The FACI study was specifically designed to understand the identities of teens who continue to use tobacco and how they are different from those who choose to not use tobacco. In other words, the study is designed to identify the positive "function" of tobacco use that at-risk teens seek to fulfill. With this function in mind, we can identify strategies to change how tobacco is perceived to deliver this function or offer alternatives to achieve the same function. By addressing the function of tobacco, campaign messages can shift from the reasons why public health practitioners believe youth should be tobacco free to messages that provide reasons for being tobacco free that high-risk teens care about. The ultimate goal of this study is to inform and guide future tobacco prevention efforts in VT to ensure that limited resources are efficiently targeted to teens who are most at-risk in an efficient manner. This study, conducted on behalf of the Vermont Department of Health, was designed to address four main objectives:

1. Identify VT teens who are at risk for tobacco use and the personal characteristics that increase risk.

A goal of this research project was to identify the characteristics and peer crowd affiliations associated with increased risk of tobacco use among VT teenagers. By qualitatively and quantifiably identifying these characteristics, we can better pinpoint the segments of VT teen population that require intervention and prevention messaging.

2. Understand how the previously identified characteristics increase risk of tobacco use among VT teens.

In addition to identifying characteristics associated with increased risk of tobacco use, it is essential to understand how those characteristics and peer crowd affiliations increase risk for tobacco use to enable us to better consider them in future tobacco prevention programs.



3. Identify characteristics of tobacco prevention TV ads that increase or decrease their effectiveness.

Hundreds of tobacco prevention ads have been developed, produced, and aired around the world. While many ads been successful; most have not. This study aims to determine which ads can provide input for the development of an even more successful campaign targeting VT teens.

This report is designed to present all of the findings analyzed from the study as objectively as possible, followed by interpretation in the Implications & Discussion section, and concluded with a final Recommendations section. On behalf of the research team at Rescue Social Change Group, we appreciate the opportunity to provide this report and truly hope it helps the VDH achieve its objectives.



Youth Tobacco Prevention Secondary Research

Secondary research was conducted prior to this study to inform the development of study methods and ensure that researchers built upon existing research on youth tobacco prevention. The following themes were identified as the most useful during the design of the current study.

Psychological Motivation to Use Tobacco Among Youth Populations

To understand how to prevent youth tobacco use, we must understand the factors that contribute to youth tobacco experimentation and initiation, including the underlying psychological factors that put adolescents at a higher risk of tobacco use. During adolescence, youth do not have fully developed cognitive skills, which makes this age group psychologically more susceptible to tobacco use than adults (US Department of Health and Human Services, 2012). According to the 2012 U.S. Surgeon General's Report, adolescent susceptibility can be partially attributed to brain development: "given their present developmental stage, adolescents and young adults are uniquely susceptible to social and environmental influences to use tobacco" (p.460).

Several psychological traits have been shown to be risk factors for tobacco experimentation and initiation. Previous research indicates that some of the most significant personality predictors of adolescent tobacco use are risk-taking, rebelliousness, sensation-seeking, and novelty-seeking (Griffin et al., 1999; Hu, Muthén, Schaffran, Griesler, & Kandel, 2008; Stanton, Li, Cottrell, & Kaljee, 2001). In general, it is widely acknowledged that youth are more willing to take risks because brain development, in regions associated with impulsivity and motivation, is not yet complete (Chambers, Taylor, & Potenza, 2003; Lebel & Beaulieu, 2011). However, even among the youth population, those who have a higher propensity to take risks are more likely than their peers to experiment with cigarette use (Griffin et al., 1999; Stanton et al., 2001). For instance, boys and girls in the seventh grade who were classified as high risk-takers based on an adapted version of the Eysenck Personality Inventory were almost three times as likely to become heavy smokers by their senior year of high school compared to low risk-takers (Griffin et al., 1999). Rebelliousness, including the rejection of adult authority, also positively correlates with an adolescent's chance of using tobacco (Santi, Cargo, Brown, Best, & Cameron, 1994). In a study of 1,101 youth in grades seven through eleven, rebelliousness and independence were both strong predictors of smoking initiation (Mittelmark et al., 1987).

Novelty-seeking and sensation-seeking are two additional personality traits strongly associated with youth tobacco use (Hu et al., 2008). Although risk is not a required part of either trait, both novelty and sensation-seekers will often endure or seek out high-risk situations in order to meet their need for novelty or sensation. In a study of urban, low-income African-American youth, smokers scored significantly higher than non-smokers on the Zuckerman's sensation-seeking scale, which is designed to measure the extent to which a person requires and enjoys stimulation (Griffin et al., 1999; Stanton et al., 2001). Novelty-seeking is



also highly correlated with smoking, with higher levels of novelty-seeking tendencies linked to experimentation with cigarettes in both males and females (Hu et al., 2008; Wilkinson et al., 2013).

During childhood and adolescence, youth do not yet possess the ability to consider future events or consequences to the same degree as adults (Orr, Beiter, & Ingersoll, 1991). This, in part, leads to youth taking personal health risks less seriously (Levenson, Morrow Jr., & Pfefferbaum, 1984; Millstein, 1991). Among all youth, however, research suggests that those who are less capable of considering future consequences have a higher risk of becoming tobacco users than their peers (Strathman, Gleicher, Boninger, & Scott, 1994). The reverse is also true, that is, being future-oriented is associated with a lower risk of smoking among youth (Piko, Luszczynska, Gibbons, & Teközel, 2005).

In addition, a large body of academic research indicates that there is a significant association between depression and smoking (Patton et al., 1998; Patton, Coffey, Carlin, Sawyer, & Wakefield, 2006; Pesa, Cowdery, Wang, & Fu, 1997; Wang, Fitzhugh, Westerfield, & Eddy, 1995). In fact, some research suggests that depression and anxiety during the teenage years predicts smoking in young adulthood (Patton et al., 2006). A national study of 6,900 youth found that three specific symptoms of depression – "feelings of unhappiness, sadness, or depression," "hopelessness about the future," and "trouble going to sleep or staying asleep" – were significant predictors of smoking, even after controlling for all other factors, including demographics (Wang et al., 1995). Similarly, in a study of Mexican-American adolescents, researchers found significant differences in reported feelings between non-smokers and smokers (Pesa et al., 1997). For example, female smokers were 2.8 times more likely than female non-smokers to report regularly feeling unhappy, sad, or depressed, and 1.9 times more likely to often worry too much as well as often feel nervous or tense. Among males, smokers were 3.2 times more likely to report having trouble sleeping (Pesa et al., 1997). Though much of the research to date has focused solely on examining whether depression is associated with smoking initiation, some research suggests it is possible that the link between depression and smoking initiation stems from increased susceptibility to peer smoking influences (Patton et al., 1998).

Social Motivations to Use Tobacco Among Youth Populations

Beyond individual psychological traits, one of the most prominent predictors of tobacco use or avoidance is a youth's self-identity and the influence of his or her peers and/or peer groups. Indeed, youth embark on the search for self-identity in early adolescence, during which time they are psychologically vulnerable, self-conscious, and concerned about appearances and "fitting in" (Steinberg & Morris, 2011; Tanti, Stukas, Halloran, & Foddy, 2011; Konopka, 1991; Elkind & Bowen, 1979; Rosenberg, 1985). Thus, the decision to try cigarettes has been linked to attempts to gain social approval, to achieve a sense of autonomy or independence, and to avoid exclusion by peers (Evans, Dratt, Raines, & Rosenberg, 1988; Nichter, Nichter, Vuckovic, Quintero, & Ritenbaugh, 1997). During this critical period, parental influence tends to decrease while peer influence increases, giving peers and peer groups exceptional power over each others' behavior



and decisions (Wang, Fitzhugh, Westerfield, & Eddy, 1995; DeGoede, Branje, Delsing, & Meeus, 2009; DeGoede, Branje, & Meeus, 2009, Rubin, Bukowski, & Parker, 2006).

Research has repeatedly identified peer influence to be one of the largest predictors of teen tobacco use (Wang, Fitzhugh, Westerfield, & Eddy, 1995; Robinson, Murray, & Alfano, 2006; Brook, Pahl, & Ning, 2006). In a national study of adolescents, ages 14 to 18, investigators determined that peer influence was the most significant predictor for both males and females across all age groups (Wang, Fitzhugh, Westerfield, & Eddy, 1995). However, peer influence does not usually manifest in the traditional manner typically ascribed to "peer pressure." Research overwhelmingly suggests that peer pressures related to tobacco experimentation and initiation are largely indirect or coercive in style (Kniskern, Biglan, Lichtenstein, Ary, & Bavry, 1983; Urberg, Degirmencioglu, & Pilgrim, 1997; Sussman, et al., 1993).

The behaviors and attitudes demonstrated by groups of peers are also influential on an adolescent's likelihood to start smoking. Research demonstrates that youth who smoke tend to belong to groups containing other smokers, with the majority of those peer groups being composed of a mix of smokers and nonsmokers. On the other hand, youth who do not smoke typically belong to peer groups compromised of almost exclusively non-smokers (Kobus, 2003; Ennett & Bauman, 1994; Urberg, Degirmencioglu, & Pilgrim, 1997). In peer groups, behaviors and attitudes held by influential members are likely to be replicated by others (Bandura, 1977; Kobus, 2003; Rogers, 1983; Bandura, 1977). In fact, in an experimental study, researchers found that when youth smokers were exposed to a confederate smoker as part of the study, the youth smokers altered their smoking behavior to match the behavior of the actor, including cigarette volume and the frequency of puffs (Kniskern, Biglan, Lichtenstein, Ary, & Bavry, 1983). In a 6-year study of American students, peer attitudes proved to be the strongest predictor of later smoking in girls. Girls who reported that their friends were not strongly opposed to smoking were almost 11 times more likely to become heavy smokers by the 12th grade (Griffin, Botvin, Doyle, Diaz, & Epstein, 1999). These studies indicate that behaviors and attitudes demonstrated by influential peer group members are likely to be replicated by others in the peer group.

In short, as stated by the U.S. Surgeon General, the "evidence is sufficient to conclude that there is a causal relationship between peer group social influences and the initiation and maintenance of smoking behaviors during adolescence (USHHS, 2012)." The significant role that peers and peer group norms play in tobacco use makes it difficult to reach diverse youth populations with generic interventions. Instead, tailored and targeted efforts are needed to address the specific cultural images, norms and interests of each peer group that needs to be targeted.

Effectiveness of Mass Media Campaigns Among Youth Populations

With nearly 1,000 youth becoming new daily smokers each day, mass media campaigns are a crucial component to reducing and preventing youth tobacco use. Extensive evidence shows that mass media



campaigns can effectively reduce youth tobacco use and prevent initiation, even in cases where the campaign is not specifically geared towards youth (Schar et al., 2006; Tan, Montague, & Freeman, 2000). However, although research has shown that mass media campaigns are an effective strategy for preventing youth tobacco use, the findings also stress the important role that message type, format, tone, and delivery play in the success of campaigns, as well as the effect that age-targeted messaging can have on increasing successful outcomes, specifically among the youth population.

A number of studies have analyzed the effect that mass media campaigns have on youth populations. Studies of mass media campaigns in Australia, England, California, and Massachusetts show that general population campaigns, and in some cases campaigns targeted specifically at adults, effectively impacted youth smoking rates and youth attitudes about smoking (Biener, 2000; BRMB Social Research, 2002; Hassard, 2000). In Australia, for example, the "Every Cigarette Is Doing You Damage," campaign was targeted at adults, aged 18-40, but resulted in higher levels of campaign awareness among teenage smokers and recent quitters (96%) than the intended adult target (87%) (Tan et al., 2000). A separate national study of Australia's campaign found that 90% of adolescents surveyed recognized the campaign by its "Every cigarette is doing you damage" slogan (White, Tan, Wakefield, & Hill, 2003). Of those surveyed, only 16% of adolescent smokers thought the campaign was not relevant to them, and 84% of adolescent smokers felt that the campaign made smoking seem less cool and desirable (White et al., 2003).

Although mass media campaigns intended for the general population have unintentionally impacted youth, research also suggests that age-targeted campaigns can improve results among youth populations (Schar et al., 2006). For instance, studies have found that youth attitudes and behaviors have been successfully changed through youth campaigns in Florida, Minnesota, and Mississippi, as well as the truth® campaign that exclusively targeted teens (Farrelly et al., 2002; Schar et al., 2006).

Mass Media Message Types

Although mass media campaigns have been shown to effectively reduce youth smoking, not all campaign messages are equally impactful and many have seen mixed results. Furthermore, different subsets of the youth population have been found to respond differently to certain types of messaging. Thus, careful attention must be paid to message type in order to successfully impact the desired target population.

Of the message type that has been tried and tested, messages focused on the health effects of smoking have consistently been found effective among youth (Schar et al., 2006). However, the health information must either be new to the youth or presented in a new way in order to resonate with the population. In a comprehensive report on youth-targeted media campaigns in nine countries released in 2006 by the Centers for Disease Control and Prevention, researchers concluded that campaigns must present persuasive new information or perspective about the health risks of smoking in "innovative ways that engage the viewers emotionally" (Schar et al., 2006). Graphic depictions of health effects, for example, are more



likely to be effective due to the strong emotional reaction they produce. However, to be received as credible, the effects depicted must be real and youth must be presented with information they may not have previously considered (Schar et al., 2006).

Several recent youth-targeted campaigns within the United States have employed messaging centered on the deceptive practices of the tobacco industry. Research to-date indicates that these messages "can be effective, but audiences probably need to be exposed over time to several different messages regarding tobacco industry behavior" (Schar et al., 2006). Perhaps one of the most well known examples of antitobacco industry messaging is the American Legacy Foundation's truth® campaign. A 2002 evaluation of the truth® campaign found that exposure to truth® advertising successfully changed youths' beliefs about tobacco, increasing the percentage of youth who agree that cigarette companies lie (+12.3%), try to get young people to start smoking (+12.2%), deny that cigarettes are addictive (+10.6%), and deny that cigarettes cause cancer and other harmful diseases (+21.0%) (Farrelly et al., 2002). Youth exposed to truth® advertising were also more likely to agree that not smoking is a way to express independence (+22.5%) and would like to be involved in efforts to get rid of smoking (+26.4%). Though researchers concluded that truth® advertising successfully changed the way youth think about tobacco, the percentage of nonsmokers who said they would not smoke one year from the time of the study did not increase significantly (Farrelly et al., 2002). Despite this finding, based on their survey results, researchers hypothesized that continued exposure to truth® advertising would lead to decreases in youth smoking (Farrelly et al., 2002).

Data from Florida corroborates the hypothesis made by the researchers involved in the truth® campaign evaluation, and suggests that youth attitudes towards tobacco industry marketing techniques are in fact one of the strongest predictors of smoking initiation (Siegel, 2002). In a recent study of Florida's youth media campaign, declines in youth smoking were closely associated with a change in attitudes towards tobacco industry behavior. In addition, youth with a high level of knowledge about the tobacco industry's manipulation of youth through marketing were 14 times less likely to start smoking over an 18-month period (Siegel, 2002). Similarly, a Florida Anti-Tobacco Media Evaluation found that increased exposure to and awareness of tobacco industry deceptive practice ads, particularly amongst younger teens, strongly correlated with a reduced likelihood to start smoking, as well as an increased likelihood of quitting (Sly, Heald, & Ray, 2001).

However, results from several studies of mass media campaigns involving tobacco industry messaging suggest that careful message testing must occur to prevent possible confusion and ensure that the message is well received by the target youth population. One of the first ad campaigns that highlighted the deceptive practices of the tobacco industry was a CDC-created print and TV ad in 1992. Based on previous focus group testing, the CDC chose to create a campaign directly attacking the tobacco industry's advertising practices. However, in testing the campaign's print and TV ad with 240 teens from various



backgrounds in nine different U.S. cities, the ad message was deemed so confusing that 38% of youth actually believed that the message promoted smoking (McKenna & Williams, 1993). A similar cautionary tale arose from a 1999 CDC-sponsored multistate focus group in Massachusetts, California, and Arizona (Teenage Research Unlimited, 1999). In the focus group study, messages focusing on tobacco industry deceptive practices were better received in areas where the messages were familiar, but were widely seen as confusing in states where the messages were new (Teenage Research Unlimited, 1999). Limited research also suggests that anti-tobacco industry messaging may not be as effective in tobacco growing states, such as North Carolina, where deceptive practice ads were rated less likely to cause youth to stop and think, in part because North Carolina youth reported that the tobacco industry has a right to make money (UNC, 2001).

In light of relatively limited research on youth-specific messages, particularly around tobacco industry practices, some research suggests that utilizing both message types might result in higher success. In California, for example, its campaign focusing on the harm caused to others by tobacco use while also exposing tobacco industry practices had the highest combination of recall (Independent Evaluation Consortium, 1998). An analysis of California's combination campaign concluded that it successfully decreased youth smoking (Balbach & Glantz, 1998; Goldman & Glantz, 1998).

A comprehensive review of youth-targeted campaigns in 9 countries failed to find consistent evidence for other messaging types, including social approval skills, secondhand smoke, cosmetic effects, and individual choice messaging. In reviewing campaigns that utilized social approval or disapproval skills, researchers concluded this type of messaging can be effective in increasing awareness and reducing intention to smoke. However, research is limited to controlled trials, and broad population programs have not seen success in changing actual youth smoking behavior even when high campaign awareness exists (Schar et al., 2006). Although there is limited data, the same review concluded that messaging focused on the cosmetic effects of smoking, addiction, or smoking's impact on athletic performance is less effective than ads that directly address long-term health effects or the industry's deceptive behavior (Schar et al., 2006).

Overall, it is important to note that although a consensus is slowly emerging, research focusing on ad themes has produced findings that are mixed (Farrelly et al., 2002). Two possible reasons include differences in research methodologies and ad execution. Additionally, differences in youth cultures, geographic nuances, and campaign length may also play a part in explaining these discrepancies. Careful testing of proposed ad messaging among the intended youth audience is recommended to prevent counterproductive results and ensure success.

Mass Media Message Tone

In recent years, a variety of tones have been employed in youth-targeted campaigns with varying success. Overall, a consensus exists that successful ads must evoke emotion, and research suggests that negative



emotion (such as disgust, loss, sadness, or anger) is more effective than positive emotion. In general, research tells us that emotional messages are more likely to be remembered (Lang, Dhillon & Dong, 1995). Thus, engaging viewers emotionally is important to an ad's overall effectiveness, as recall is crucial to a successful ad campaign (Biener, 2000). In a multi-city study, youth were most likely to recall, discuss, and think about ads with personal testimonies or a "negative visceral element" (Wakefield, Flay, Nichter, & Giovino, 2003). The same study was conducted in Australia and Great Britain with similar results (Wakefield et al., 2003). A study of Massachusetts' youth ad campaign also found that youth were more likely to recall ads that produced negative emotions than ads that produced positive emotions (Biener, 2000). Likewise, in a multistate focus group study where youth rated a series of tobacco prevention ads according to whether the ads would cause them to "stop and think" about not using tobacco, three-fourths of the ads with the highest ratings generated strong negative emotions (Teenage Research Unlimited, 1999). Youth involved in the focus group study consistently gave the highest ratings to ads that "graphically, dramatically, and emotionally" depicted the serious negative consequences of smoking. In the same study, the ads least likely to make youth "stop and think" were the ads sponsored by the tobacco industry, possibly because the messaging utilized did not challenge the viewer's beliefs or produce an emotional response (Teenage Research Unlimited, 1999).

Although research suggests that negative emotions are most effective, the research also indicates that any variety of negative emotions may work, not just fear, loss, or sadness. For example, in Norway, researchers developed a media campaign targeted exclusively at girls intended to evoke shame. At the time, the smoking rate in Norway was higher among girls than boys, and the Norwegian campaign targeted girls with the message, "Girls are stupid because the more we know about the health risks of smoking, the more Norwegian girls start to smoke." A significantly higher percentage of girls exposed to the campaign stopped smoking as compared to the control area (25.6% vs. 17.6%) (Hafstad, Aarow, Engeland et al., 1998). However, the study cautioned that such a campaign might not be as well received in the United States (Hafstad et al., 1998). Overall, a CDC review of youth-targeted campaigns in nine countries concluded that "ads with strong and credible negative emotional appeal – leading the viewer to feel a sense of personal loss, sadness, anger, disgust, or fear – increases the attention to, and recall of, ads among youth audiences and enhance the ads' effectiveness" as youth respond more strongly to ads that produce negative emotions than ads that are humorous (Hafstad et al., 1998).

Studies of past youth-targeted media campaigns also suggest that it is important for the campaign tone to avoid being "preachy" or authoritarian. Ads that come across as "preachy" are often rejected by youth and can become counter- effective (Schar et al., 2006). Similarly, current research suggests, "emotionally compelling ads (such as personal testimonies) and those with strong graphic depictions run the risk of emotionally exhausting certain audience members if these ads are broadcast for significant periods of time, potentially producing a defensive response to the message (Schar et al., 2006). The possibility of burnout



further supports utilizing multiple messaging types and formats, as seen in California's ad campaign (Balbach & Glantz, 1998).

Mass Media Message Format

Within the youth population, different message formats have been shown to work better with different age groups. One crucial format factor is whether a member of the youth community is used to deliver the message itself. For example, research shows that youth often discount messages that appear to speak to a younger age group and that youth typically respond better to ads that show people who are perceived as attractive, cool, and several years older (Zollo, 1999). Those findings are supported by a study of The Target Market campaign in Minnesota, which found that using teen members as spokespeople was not successful among high school students because other youth were not interested in watching youth who looked their age or younger (Ergo International, 2001). However, the same campaign was effective among middle school students (Ergo International, 2001). These findings are supported by the CDC's comprehensive review of past youth media campaigns, which concluded that youth should be used in ads with caution due to a high probability of other youth finding the messenger too close to their own age, not attractive enough, too attractive, or not cool enough (Schar et al., 2006). Therefore, careful testing of the individual featured in the ad is necessary to ensure that the format is not interfering with the message itself.

Several past youth-targeted media campaigns have used testimonials or personal stories with success. Testimonials tend to elicit a strong emotional response and appear credible (Schar et al., 2006). Research suggests that personal testimonies are also less likely to be received as preachy or authoritarian since they are not coming from an expert authority (Schar et al., 2006). Another potential cause for the success of highly emotional, personal testimonial ads is attributed to the power narratives have to reduce the tendency towards counterarguments and self-exemptions, unlike an expert testimony or demonstration (Biener, 2000).

Mass Media Message Reach and Frequency

With any mass media campaign, an increase in media expenditures (and therefore media placements) directly translates into increases in individual awareness of campaign advertisements (Farrelly et al., 2002). When designing a youth-targeted campaign, research suggests that messages must be shown frequently as youth require time to internalize material before any behavior change can occur (Schar et al., 2006). This finding is supported by a study of New York's youth-focused media campaign which found that for every \$1,000 increase in the TV, radio, and print expenditures, calls to the quit line increased by 0.1%, 5.7% and 2.8% respectively (Davis, Nonnemaker, & Farrelly, 2007). Likewise, research shows that multiple message strategies and media channels can increase the effectiveness of a youth-targeted campaign (Schar et al., 2006).



Research Methods

In November 2012, Rescue SCG researchers travelled to VT where they conducted 8 focus groups with 82 high school students, ages 13 to 19.

Locations

The state of Vermont includes 14 counties, and although the majority of the state is white at 95.4%, there are varying levels of socioeconomic status and education represented throughout the state (US Census Bureau, 2012). In order to maximize the results from this research and their applicability, three high schools and one career center were selected by VDH to be part of this research effort, which includes Burlington, Enosburg, Black River High Schools, and Hannaford Career Center. Breakdowns of participating high schools can be found in Tables 1 and 2.

Table 1. Student Demographics from Participating Schools and Organizations*

School	Enrollment	White	Black	Hispanic	American Indian
Burlington HS	1,074	72.7%	12.8%	2.1%	0.3%
Enosburg Falls HS	447	95.7%	0.4%	0.7%	0.2%
Black River HS	235	96.4%	0.5%	0.0%	0.0%

Data obtained from the National Center for Education Statistics.

Table 2. Percent Drop Out Rates And Free Lunch Eligibility At Participating High Schools

Cohool	% Dropped Out	% Eligible for Free		
School	(2010-2011)	or Reduced Lunch (2013)		
Burlington HS	7.7%	51%		
Enosburg Falls HS	15.9%	47%		
Black River HS	2.4%	45%		

Data obtained from the Vermont Agency of Education.

Two focus groups were conducted with high school students at the Patricia A. Hannaford Career Center in Middlebury, VT. The Hannaford Career Center is an alternative school for teens who experienced difficulties in the traditional school environment. The majority of students served at the Hannaford Career Center in Middlebury, VT originally come from Middlebury Union High School, Mount Abraham Union High School, and Vergennes Union High School. The center also serves students from private schools, homeschooled students, and high schools in the outlying areas (Hannaford Career Center, 2013)



^{*}Demographic data about Patricia A. Hannaford Career Center are not available.

Focus Group Recruitment

All participants were recruited through convenience sampling. At high schools, participants were recruited during lunch periods at their respective schools. Participants were selected based on self-reports on a 37-item recruitment survey inquiring about risk behaviors (including tobacco use history) and social tendencies. Students who reported having used tobacco products (cigarettes, cigarillo, spit) in the past 30 days were selected to participate, followed by students who reported that more than half of their friends used tobacco. At the alternative school at Hannaford Career Center, participants were hand-selected to participate by school officials based on tobacco use.

At the high schools, students who were selected to participate in the focus groups were provided with a passive parental consent form and scheduled to participate in focus groups the following day. At Hannaford Career Center, since there was no lunchtime recruitment, selected youth were given more time to complete passive parental consent forms. Each participant received a \$25 incentive in the form of a prepaid Visa gift card in exchange for his or her participation in a 2-hour long focus group.

Focus Group Activities

After the check in process, the focus groups conducted at each location were composed of various exercises and discussion topics described below:

<u>Welcome</u> – An introduction to the study, discussion of confidentiality, ground rules, and a verbal agreement to participate. At this time, participants consented to have the discussion group audio recorded on a tape. Facilitators used this time to create a conversational tone with the group, to reduce discomfort, and attenuate situational factors (i.e. presence of adults in a classroom setting) that could affect the validity of self-reported risk behaviors during the discussion (Brener et al., 2003).

Group Picture Sort – When the group arrived, they were given a stack of pictures of anonymous teenagers that represented various peer crowds. Participants were asked to work together to organize the photos into groups of friends that would socialize with one another in their school or community, with a limit of 10 groupings. The group was instructed to make a separate group for photos that were not represented in their school or community. When the groupings were completed, a facilitator engaged participants in a discussion to determine descriptive keywords, estimates of risk behaviors, and projected size of the social groupings. The facilitator recorded this information, which is used to understand the qualitative properties of each group discussed and their relative size in VT.

<u>Discussion of Local Youth Culture</u> – This part of the discussion group was designed to provide insight into youth culture in VT including how/where specific peer crowds socialize and spend their free time. The groupings made in the Group Picture Sort allowed researchers to more easily discuss each peer crowd separately.



<u>Discussion of Local Tobacco Use</u> – Participants were asked to discuss tobacco use at their school and in their community, with topics ranging from which peer crowds are believed to use tobacco, the types of tobacco used by each peer crowd, and the perceived amount of tobacco use consumed by different peer crowds in VT.

Tobacco Ad Test – This exercise lasted approximately 60-70 minutes due to the volume of videos tested. Respondents were asked to watch 20 tobacco prevention advertisements. After each ad viewing, participants individually answered a set of written questions, followed by a group verbal discussion. The questions focused on understanding the potentially effective facets of an ad and an overall effectiveness rating for each ad. The discussion was focused on understanding perceptions of the ad and its effectiveness in persuading teens not to use tobacco. Ads from truth®, ydouthink, Venomocity, OVX.org, Tobacco Free Florida, Smokefree Vegas, NYC Health, and CDC were presented. Given the number of advertisements and length of discussion, some of the later ads in the series were not shown in order to allow the natural progression of discussion to occur. See Table 3 for a full listing of the ads that were included in the study.

Table 3. Tobacco Videos Shown

Name	Brand
"Kiss"	ydouthink (Virginia)
"Do You Have What It Takes?"	truth® (National USA)
"Animal Testing Booth"	ydouthink (Virginia)
"lcons"	Tobacco Free Florida (Florida)
"Pets Health"	ydouthink (Virginia)
"Listen To Your Gut"	OVX.org (Vermont)
"Animal Testing Monologue (Male)"	ydouthink (Virginia)
"Deforestation"	ydouthink (Virginia)
"Unsweetened Parade"	truth® (National USA)
"Body Bags"	truth® (National USA)
"What Girls/Guys Think Is Hot"	ydouthink (Virginia)
"Animal Testing Monologue (Female)"	ydouthink (Virginia)
"The Magical Amount"	truth® (National USA)
"Hookah"	Smokefree Vegas (Nevada)
"Fair Enough"	truth® (National USA)
"Attractiveness (Male/Female)"	ydouthink (Virginia)
"Roosevelt Tips"	CDC (National USA)
"Reverse The Damage"	NYC Health (New York)
"Addiction"	Venomocity (Arizona)
"Terrie Tips"	CDC (National USA)



Instrument and Activity Design

Rescue SCG carefully crafted each activity and instrument using best practices in qualitative and quantitative research, and when appropriate, best practices specific to tobacco control research. In terms of tobacco use reporting, retrospective self-reported tobacco use is a validated method of collecting accounts of tobacco use history from adolescents (Brener et al., 2003). Research shows that questions that inquire about short-term and recent tobacco-use history tend to be more accurate than questions asking participants about tobacco use in the last year, where recall tends to be relatively inaccurate (Brener et al., 2003). Thus, Rescue SCG further reduced the possibility of inaccurate recall by asking participants to recall their tobacco use in the previous 30 days, to account for infrequent or episodic smoking episodes (Brener et al., 2003).

For qualitative data collection, it is important to control for various situational factors that can affect participants' willingness to contribute to discussion (i.e., adult facilitators asking participants about risk behaviors in front of their peers in a school setting). Rescue SCG reduced this threat to validity by creating a safe, conversational environment for discussions (Brener et al., 2003). The use of quantitative collection tools during the focus groups allowed participants to then answer personal questions independently to reduce the potential for social disapproval (Brener et al., 2003). In contrast, group activities (i.e. group picture sort, discussion) allowed groups of participants to reach a consensus. These mixed research methods allow participants to express diverse perspectives that may diverge from the group. By facilitating opportunities for both personal and group responses, we attain a more comprehensive look at this population.

Participant Description

Gender was approximately equal with 56% of the participants reporting their gender as male. The majority of participants were White (87.7%) and the other participants were a mix of Black (2.5%), Asian (2.5%), Hispanic (2.5%), American Indian (2.5%), and "Other" 2.5%. Participants were all high school students with an average age of 16 years. As expected with high school focus groups, 16 and 17-year olds accounted for 66% of the respondents. Race and age information is presented below in Figures 1 and 2.

Figure 1. Participant Race

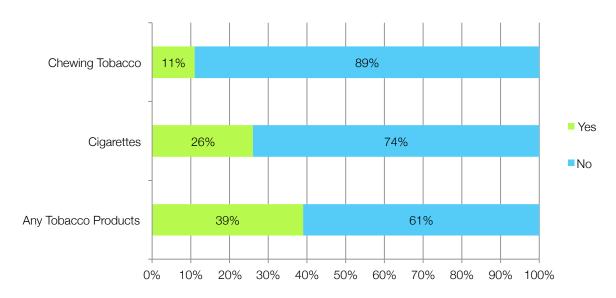
Figure 2. Participant Age





Participants reported the number of days they used tobacco in the last 30 days, and whether or not they have ever used tobacco. At 58%, a majority of the respondents indicated that they had used tobacco at some point in their life, and 39% of participants indicated that they have used some type of tobacco in the last 30 days. 26% reported using cigarettes in the last 30 days, and 9% reported using cigarettes every day. 11% reported using chewing tobacco in the last 30 days and 2.5% reported using chewing tobacco every day. See Figure 3 for a summary of self-reported tobacco use in the last 30 days.

Figure 3. Self-Reported Tobacco Use in Last 30 Days



Qualitative Findings Part 1: Peer Crowds of Vermont Teens

Researchers studying tobacco behaviors have long cited culture as a strong factor in the decision to use tobacco. Understanding the cultures that define the teenage landscape in Vermont is important to develop and/or maintain an effective tobacco prevention strategy. Primarily through observation and focus group research, and separate from any quantitative analysis, Rescue SCG researchers identified five teen peer crowds, including some with discernible tangent groups. Geographic distinctions were present, as certain subcultures, like Country, were heavily represented in rural Vermont, but were not as visible in more urban, populated areas. Regardless of the varying size of the peer crowds in different high schools, the characteristics of teens within these peer crowds themselves remained relatively consistent. What follows are qualitative descriptions of each of the identified peer crowds along with relevant imagery of cultural capital, as well as photos used in the discussion groups. Country, Mainstream, and Preppy are the three largest groups with fewer teens identified as Alternative or Hip Hop.

Country

The pastoral landscape in rural Vermont provides an inherent country influence to some youth that manifests in what teen participants called "Country" or "Rednecks". These youth enjoy riding all-terrain four-wheelers, going "muddin,'" and are passionate about hunting. Country youth dress for function, with Carnhardt and Wrangler brands being exemplary of a Country youth's attire in Vermont, along with the occasional camouflage-sporting jacket. This peer crowd favors country music, like Florida Georgia Line, Lee Brice, and Taylor Swift.





Mainstream

Mainstream teens represent the norm; the average teenagers that do not stand out visually compared to some of the other more distinct peer crowds. Simple, nondescript clothing is purchased from Old Navy or Walmart, with one youth participant calling them "polo shirt kids". Their taste in music rarely deviates from mainstream "top 40" radio. Some Mainstream teens are considered "nerds" and were called "Magic kids" by participants, referring to a trading card game known as Magic The Gathering. However, Mainstream teens are not necessarily geeky, sometimes being described as the opposite, or "friends with everybody."







Mainstream teens prioritize school and family over a social life, and were perceived to be focused on a successful long-term goal, like having a promising career or going to college.

Preppy

The Preppy peer crowd in Vermont is interested in mainstream pop culture and athletics. Often called "the popular crowd," "preps," and/or "jocks" by youth participants, Preppy teens were projected to prioritize having an outgoing disposition, maintaining their physical appearance, and becoming a stereotypically popular teen. One youth participant described Preppy teens as such: "They're the kids that play soccer, probably, varsity sports, they're in pretty good classes but they don't sound particularly smart when they talk" (Female, Burlington).





These youth find their fashion at Abercrombie and Fitch, American Eagle, Aeropostale, and Hollister. Preppy teens in Vermont listen to accessible, popular music, like Top 40 Rock, Hip Hop, R&B, and Country. Unlike other peer crowds, like Hip Hop and Alternative youth, Preppy teens are less focused on the music than they are on what activity the music is accompanying, like a night of drinking at a house party.

Alternative

Modern Alternative teen culture is made up of Scene, Hipster and Goth types. While each listens to a different genre of music and has a different clothing style, their shared values and attitudes lead all three groups to fall under the Alternative canvas. While the Scene subculture held a strong presence across the research sites in Vermont, the Goth group was smaller, as it is the more extreme of the Alternative peer crowds amongst Vermont teenagers. Youth participants also noted the emergence of Hipsters, a traditionally young adult peer crowd.

Scene

The Scene group is the more traditional and more approachable branch of the Alternative youth peer crowds in Vermont. Scene teens were observed to be friendlier and more forthcoming than Goth youth, and seemed to socialize with teens outside of the Alternative peer crowd. Scene youth that are heavily influenced by skateboard or snowboard culture shop at Pacific Sunwear, Tilley's, and Zumies, where brands like Volcom, Empyre, and







Billabong are the standard. Scene teens also shop at Hot Topic where a bevy of Scene band t-shirts are sold. Generally, the aforementioned clothing is tight-fitting, features brightly colored band t-shirts, and is punctuated with lip piercings called "snake bites." Popular Scene bands include Asking Alexandria, The Devil Wears Prada, Bring Me The Horizon, and Blood On The Dance Floor. It is worth noting that one participant believed that Scene was a peer crowd for younger teens and that older teens evolve into Hipsters. He explains, "There are no Scene seniors. They grow out of that. They turn into Hipsters. (Male, Burlington).

Hipsters

Hipsters, an Alternative peer crowd that is regularly found in young adult culture, has trickled down to teenagers in VT. Teen participants noted that this peer crowd consisted of older high school students who had previously been affiliated with Scene culture.



Hipsters project an attitude of apathy regarding their clothing style, but, in fact, their apparel is often highly calculated. This peer crowd shops at local thrift stores and online boutiques looking for vintage clothing to wear to the indie rock concerts they attend. Hipsters, like most teens, are internet-savvy, particularly when it comes to adopting social media platforms, like Tumblr and Instagram. This peer crowd values the arts and authenticity, and are generally anti-big corporation. While no pictures in the grouping exercise fully encapsulated Hipsters in Vermont, the above graphic shows influential brands in this peer crowd.

<u>Goth</u>

While representing only a small portion of Alternative youth in VT, Goth teens embrace the darker, heavier side of Alternative style. While their Scene peers listen to music that contains both screaming and singing vocals, Goths prefer music that is almost all screaming, such as metal and deathcore acts Suicide Silence, Emmure, Slipknot, and sometimes rap/rock outfit the Insane Clown Posse, which, while deviating musically from the Goth scene, still attracts the same visual aesthetic and attitude of the Goth peer crowd. Current Emo/Goth styles are baggy, strictly black, decorated with chains, and purchased from Hot





Topic. Though this group was said to sometimes associate with Scene teens, it was agreed across discussion groups that this subculture generally isolates itself from most high school peer crowds and bonds over their perceived feeling of being "outcasts."



Hip Hop

Hip Hop is a relatively small teen peer crowd in Vermont. Hip Hop has several subtypes, including Flashy and Hard Hip Hop. Flashy Hip Hop is the subtype most commonly seen among teens in VT, with relatively few falling into the Hard Hip Hop category. However, since the peer crowd is so small in VT, all the subtypes hang out together.

The Flashy Hip Hop peer crowd looks mostly to mainstream Hip Hop for cues in fashion, slang, music, and cultural capital in general, but digs into the Hip Hop mixtape circuit as well. Clothing brands preferred by this subculture include LRG, Gucci, Crooks and Castles, and True Religion, and are usually loose fitting for males, tight fitting for females. Flashy jewelry comes in sparkling



earrings, low-hanging chain necklaces, and (faux) diamond bracelets and watches.

Some youth extend their affiliation with Hip Hop to a style called Hard Hip Hop. This corner of Hip Hop positions itself as rowdy, tough, and occasionally explicitly links itself to street gang culture. While their Flashy Hip Hop peers may occasionally dress in "skinny" jeans and possibly wear skate shoes, the Hard Hip Hop teens are almost always seen in baggy jeans and oversized t-shirts. They are generally less approachable, as they prioritize an image that is often the antithesis of welcoming.

Discussion group participants primarily called all Hip Hop youth "gangstas." The term "gangsta," however, is often used loosely by youth to describe this peer crowd overall and usually does not literally refer to gang participation. Instead, it is a categorical term used to define all those that identify with the Hip Hop style.



Qualitative Findings Part 2: Teen Tobacco Use

In order to receive a first hand account of tobacco use among teens, focus group facilitators engaged teen participants in conversations about local tobacco use. Participants were asked to describe the nature of tobacco use in their school, as well as their perception of the prevalence of tobacco use. Teens then described the types of peer crowds who used tobacco, their motivations for smoking, and local accessibility to tobacco.

Qualitative Analysis of General Teen Tobacco Use

The perceived rates of smoking among high school youth are variable across the state of Vermont. Some felt that smoking rates were moderate, stating, "About 35% of kids here smoke" (Female, Black River). These teens also indicated that they observe higher rates of smoking among teens who have graduated already, "All the people who are out of high school smoke cigarettes" (Female, Burlington). However, it was noted that this could be because access to tobacco is easier once one is of legal age. Some said that smoking tobacco was not as popular among their peers as it once was, saying, "It's not really a trend anymore to smoke cigarettes," (Female, Burlington) while others acknowledged that they maybe have turned a blind eye to it; "Maybe we don't notice as much kids smoking now, because we're just used to it" (Female, Burlington). However, in more rural areas, the perceived rates of tobacco use among teens were markedly higher; "I guarantee 90% of this school smokes or chews" (Female, Enosburg) and "If you searched this whole school, do you know how many cartons you'd end up with? A lot" (Female, Enosburg).

Smoking is engrained in the lives of Vermont teens. Many have older siblings, parents, and friends who smoke; "[I started] when I was 12 [because of] my step dad. My step dad is also the one that got me smoking pot. He gave one to me and then every time we would smoke pot, he'd give me a cigarette. So it became a habit. It's an awkward situation" (Female, Enosburg). Teens noted that another major reason they smoked was out of boredom; "Here you do it because there's nothing else to do" (Female, Black River). Addiction is not at the front of their minds, with few students believing they are personally addicted; "No one makes a big deal of it [addiction]" (Female, Black River) and "The people who do it on a regular basis don't say [they are addicted], but the people who are trying to be cool push it" (Female, Black River), indicating that some teens may exaggerate their level of dependency to showoff. Most teens indicated that they were not trying to quit, but some admitted they have tried to quit in the past; "I quit for about five months, but then I started smoking again. I didn't want to smoke anymore. I can't smoke in my house and my little brother has asthma. You know...the [stuff]'s bad for you" (Female, Enosburg).

Many teens have family members who have experienced health problems related to tobacco; "My grandparents are on oxygen from it" (Male, Hannaford) and "My uncles have been smoking since they were 12. They don't have many teeth left. They're all rotting out. They don't talk fast" (Male, Hannaford). Some



have even experienced negative health effects of smoking personally, with one teen saying, "I can't run anymore, I would love to be able to run again...the gym, I can probably run half court in the gym and then I'm like 'Oh my god give me a cigarette, I can't do this anymore'" (Female, Enosburg). Despite this evidence, some are highly critical of the probability that someone will get a smoking-related disease, quick to cite examples of adults they know who use tobacco but are relatively healthy; "Those are extreme cases. I know my grandfather's been smoking since he was 16 years old, and he's about 80 and he doesn't look like that" (Female, Enosburg) and "You see your parents smoking for twenty years and they're still perfectly okay" (Male, Black River).

There was some brief discussion about the accessibility of tobacco to underage teens in Vermont, a topic on which participants were divided. Some said that it is difficult to obtain tobacco; "In high school it's a lot easier to get weed than cigarettes. I know at least five people who grow and sell their own weed" (Female, Burlington). Others said it was relatively easy to get cigarettes, especially if one has friends who are over the age of 18. Some said it was not even necessary to get older friends to purchase the tobacco on their behalf; "There's a tobacco shop downtown, and if you have connections or you know people that work there, they'll give it to you" (Female, Burlington).

Besides cigarettes, teens noted several other types of tobacco commonly used by teens in Vermont. At a couple of the schools, the teens mentioned cigarillos and cigars with some frequency. They mentioned Swisher Sweets by name, particularly strawberry and vanilla flavored, as being very popular.

- "I feel like cigarillos are getting a lot more popular" (Female, Black River);
- "I feel like cigars and cigarillos are way more popular than cigarettes" (Female, Black River);
- "I also see cigarillos...a lot of my friends talk about going to buy cigarillos" (Female, Burlington).

Chew was perceived to be very popular across the state, but especially in more rural areas. One student noted that students dip while in school, saying, "Everyone chews. They do it in school, too. You see rednecks walking down the hallway with the big dip in their lips, and the teachers don't say anything" (Female, Enosburg) and "You can tell. They've got that imprint in their back pocket" (Female, Black River). They did indicate that it was more common among male teens than female; "I know 3 girls who chew" (Male, Hannaford) and "Most girls don't chew" (Female, Enosburg). Many of the female participants indicated that they did not find chew tobacco use an attractive quality in their male schoolmates, saying:

- "It's the worst smelling thing ever" (Female, Black River);
- "Everyone that chews that I can think of is single" (Female, Black River);
- "Along the line of chew, a lot of people think that's gross" (Female, Burlington).

Hookah is popular among teens in Vermont as well; "Oh yeah, [hookah] is huge. At least half the people in the school own their own hookah" (Female, Black River) and "I see Hookah a lot. In Fairfax I see hookah"



(Female, Burlington). Hookah is perceived as a fun, social activity and, even if hookah has negative health consequences, teens felt their use was not frequent enough to be concerned about it; "We know it's tobacco, it's just flavored, but you sit down with four people so, if it's a hundred cigarettes, that's twenty-five a piece, a pack apiece. Yeah, it's kinda rough but as long as you aren't doing it everyday" (Male, Hannaford). Some teens view hookah as healthier than smoking cigarettes and grew defensive when the negative health effects were mentioned; "They make it sound really bad, but they don't mention that there's not all the nicotine and crap that there is in cigarettes...they're gonna lie to you to get you not to smoke hookah" (Female, Black River). Some teens, however, recognized that their peers might be rationalizing their hookah use, saying, "Smoking hookah is fun, so I feel like people try to defend it" (Female, Black River).

Finally, most teens were not aware of e-cigarette use among their peers. They mostly saw e-cigarette use among adults, particularly those trying to quit. They do view e-cigarettes as a healthier alternative to regular cigarettes, saying, "[E-cigarettes] are more health conscious" (Female, Burlington) and "If I were to smoke, I would probably use electronic cigarettes" (Male, Burlington).

Qualitative Analysis of Peer Crowd Tobacco Use

The topic of tobacco use among peer crowds was introduced to the teen focus group participants during the group picture sorting activity. They were asked about various health behaviors of each group, including tobacco, alcohol, and drug use. The following analysis is based on their comments during that discussion.

Country

The Country peer crowd, which the Vermont teens referred to as "rednecks," was recognized as a larger group with one of the highest rates of tobacco use, saying:

- "Rednecks...smoke the most" (Female, Burlington);
- "Rednecks chew the most tobacco" (Male, Hannaford);
- "The hicks party the hardest" (Male, Black River);
- "You see the rednecks walking down the hallway with the big thing in their lips and the teachers don't say anything (Female, Enosburg).

Focus group participants also mentioned that Country teens who primarily smoke cigarettes will switch to chewing tobacco during hunting season, so the smoke does not scare off the animals. Thus, many Country teens use both cigarettes and chew regularly, "All the rednecks chew and smoke cigarettes" (Female, Enosburg).



Mainstream

The Vermont teen participants said that smoking prevalence among Mainstream was low. They specifically referred to the nerdier teens, or "Magic" crowd, "Nerds don't smoke at all" (Male, Burlington) and "Magic kids don't smoke. It would set off their asthma" (Female, Burlington). In Burlington, the focus group participants mentioned a large immigrant population in their school, particularly from Nepal and parts of Africa. It was noted that rates of smoking are high among these students; "Nepalis smoke so much" (Male, Burlington) and "My friends smoke. Some are from Nepal, some are from other countries" (Male, Burlington).

Preppy

Tobacco use among the Preppy peer crowd was perceived as being rare. The teens noted that preppy teens do occasionally smoke; "They smoke but they are more discreet about it" (Female, Burlington). However, it was more commonly indicated that this group does not smoke:

- "Some of them don't because they're more health conscious, because some of them are jocks" (Female, Burlington); and
- "You never see the popular kids chew. They've got shiny teeth" (Male, Hannaford).

Alternative

Teens in Vermont mentioned the alternative peer crowd, with particular reference to Scene and Hipster teens, as having high relative rates of smoking:

- "It's the hipsters that smoke" (Female, Burlington);
- "They smoke and they take pictures of themselves smoking" (Female, Burlington);
- "For hipsters, [smoking] is more of a fashion trend" (Female, Burlington).

Hip Hop

Although this is a relatively small group in VT, tobacco use among the Hip Hop peer crowd is seen as prevalent, with high rates relative to the Country peer crowd. They said, "Rednecks and gangsters smoke the most" (Male, Enosburg). However, they noted that there are not a lot of teens that fall into this peer crowd in Vermont, so the discussion regarding this group was not robust.



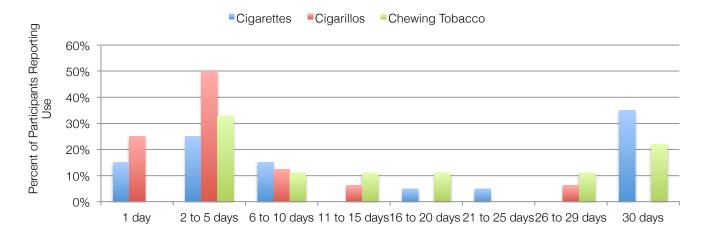
Quantitative Analysis

Unlike conventional discussion-based focus groups, Rescue SCG supplements focus group discussions with quantitative data collection activities to achieve a well-rounded data-based approach. The quantitative components of the study include participants' reported tobacco use from the recruitment survey and a quantitative tobacco ad assessment completed during focus groups. In this section, results from the quantitative exercises are discussed.

Tobacco Use Risk Factors

In the recruitment survey, participants reported varying levels engagement with different forms of tobacco. For each type of tobacco, participants indicated the number of days in the previous month that they had used that product. 39% of participants reported using any tobacco in the last 30 days. When asked specifically about use of various tobacco products over the last 30 days, 25.6% had smoked cigarettes, 20.5% had smoked cigarillos, and 11.4% had used chewing tobacco. Figure 4 presents the number of days that participants indicated they used each type of tobacco during the last month. The percentages are not mutually exclusive because some participants reported using a combination of varying levels of cigarettes, cigarillos, and chewing tobacco.

Figure 4. Number of Days of Reported Tobacco Use Among Participants Reporting Use



In terms of amount of tobacco use, we see most participants who used tobacco reported using tobacco products between 1 and 10 days out of the last 30. Cigarillos were the most popular choice with 87.5% of tobacco users smoking cigarillos between 1 and 10 days out of the last 30 (see red bars at 1, 2 to 5, and 6 to 10 days). A subset of participants also reported using tobacco between 26 and 30 days out of the last 30. Cigarettes (35%) and chewing tobacco (33%) were the most popular choices for daily users (see green and blue bars at 26 to 29 and 30 days). Participants were also asked to indicate how many of their friends



used tobacco products in the last 30 days with 43.4% indicating that more than half of their friends (i.e., "Most of my friends" or "All of my friends") used tobacco in the last 30 days.

Ratings of Youth-Focused Tobacco Prevention Ads

Participants were asked to view and rate the effectiveness of 20 different youth-focused tobacco prevention ads by answering the question, "Do you think this commercial would convince people your age to live tobacco-free?" The ratings were made on a five-point Likert-type scale, ranging from "Definitely Not" to "Definitely Yes". The ads shown represented a wide array of concepts, including stimulating thought, emotionally evocative, funny, and serious.

Table 4 and Figure 5 show the effectiveness ratings, indicating how likely the ad is to "convince people your age to live tobacco-free". "Definitely Not" and "Probably Not" were combined as were "Definitely Yes" and "Probably Yes" to provide an indication of Low and High ratings of effectiveness. Medium corresponds to a rating of "Maybe."

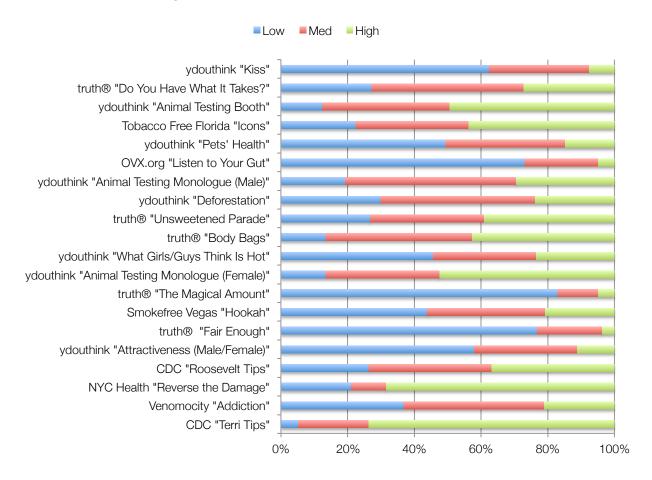
Table 4. Effectiveness Ratings of Ads

Name	Brand	Ν	Low	Medium	High
"Kiss"	ydouthink (Virginia)	80	63%	30%	8%
"Do You Have What It Takes?"	truth® (National USA)	77	27%	45%	27%
"Animal Testing Booth"	ydouthink (Virginia)	81	12%	38%	49%
"Icons"	Tobacco Free Florida (Florida)	80	23%	34%	44%
"Pets Health"	ydouthink (Virginia)	81	49%	36%	15%
"Listen To Your Gut"	OVX.org (Vermont)	82	73%	22%	5%
"Animal Testing Monologue (Male)"	ydouthink (Virginia)	78	19%	51%	29%
"Deforestation"	ydouthink (Virginia)	80	30%	46%	24%
"Unsweetened Parade"	truth® (National USA)	82	27%	34%	39%
"Body Bags"	truth® (National USA)	82	13%	44%	43%
"What Girls/Guys Think Is Hot"	ydouthink (Virginia)	81	46%	31%	23%
"Animal Testing Monologue (Female)"	ydouthink (Virginia)	82	13%	34%	52%
"The Magical Amount"	truth® (National USA)	82	83%	12%	5%
"Hookah"	Smokefree Vegas (Nevada)	82	44%	35%	21%
"Fair Enough"	truth® (National USA)	82	77%	20%	4%
"Attractiveness (Male/Female)"	ydouthink (Virginia)	81	58%	31%	11%
"Roosevelt Tips"	CDC (National USA)	19*	26%	37%	37%
"Reverse The Damage"	NYC Health (New York)	19*	21%	11%	68%
"Addiction"	Venomocity (Arizona)	19*	37%	42%	21%
"Terrie Tips"	CDC (National USA)	19*	5%	21%	74%

^{*}Given the length of videos and discussion, some ads that appeared later in the focus group were skipped in order to facilitate natural progress of discussion.



Figure 5. Effectiveness Rating of Ads



As summarized in Table 4 above and Figure 5 above, Terrie Tips (#20) and Reverse the Damage (#18), were rated the two most highly effective by 74% and 68% of participants, respectively. Animal Testing Monologue (Female) and Animal Testing Booth were the next highest in effectiveness, with 52% and 49% of participants rating them highly effective, respectively. As noted in N column in Table 4, more participants viewed the animal testing ads, which increases confidence in their ratings. Conversely, three ads were rated low in effectiveness by 73% or more teens: The Magical Amount (83%) and Fair Enough (77%) from the truth® campaign, and OVX.org's Listen to Your Gut (73%). These findings suggest that while no single ad or group of ads reach all teens, there were four ads rated to be more effective than others: hard-hitting ads that demonstrate the detrimental health outcomes related to smoking and ads that emphasize tobacco industry animal testing. In contrast, ads that are intended to be funny are rated less effective.

Ads that were perceived as moderately effective include ydouthink's Animal Testing Monologue (Male) and Deforestation at 51% and 46%, respectively, as well as truth®'s "Do You Have What it Takes?" and "Body Bags" at 45% and 44%, respectively. These ads demonstrate the effects that tobacco and the tobacco



industry have on nature, animals, and humankind.

Now that we have some indication of what ads were rated effective, the next step was to identify what ad characteristics make some ads more effective than others. An effective ad is defined as one in which participants positively report that it "would convince people your age to live tobacco-free".

Reported in Table 5 on the next page are the Pearson's (r) correlation coefficients and Coefficients of Determination (R^2) between each ad fact (left column) and the item assessing overall effectiveness in convincing youth to live tobacco-free. The correlation (r) information tells us if the relation exists outside of chance and its strength. Then, by calculating R^2 ($r \times r$), we produce a percentage of variability in reported effectiveness that is due to the particular ad facet. For example, for "This commercial really made me THINK," $R^2 = .16$, which means that 16% of the variability in effectiveness is due to the ad making youth think.

All correlations are positive, which means that as the rating of the facet increases, so does the rating of effectiveness. "This commercial was funny" was not significantly related to effectiveness, which means that youth did not think funny commercials were effective. All other facets were significantly related to ad effectiveness, though four items showed the strongest correlations and accounted for the most variance at $R^2 = .16$: "This commercial made me think," "This commercial was creative," "This commercial was serious," and "This commercial was interesting."

Table 5. Ad Facets Predicting Effectiveness

Ad Facets	Ad Facet Relation to "Live tobacco-free" Effectiveness, r	Significance, p-value	R2 (% of variability in Effectiveness due to the Ad Facet)
This commercial really made me THINK	0.4	.000*	.16 (16 %)
This commercial affected me EMOTIONALLY	0.18	.000*	.03 (3%)
The information in this commercial was something I DID NOT KNOW	0.31	.002*	.09 (9%)
I LIKED the people in this commercial	0.34	.001*	.11 (11%)
This commercial was CREATIVE	0.41	.000*	.16 (16%)
This commercial was FUNNY	0.02	0.4	.00 (0%)
I can RELATE with the people in this commercial	0.28	.005*	.07 (7%)
This commercial was SERIOUS	0.4	.000*	.16 (16%)
This commercial was INTERESTING	0.41	.000*	.16 (16%)

^{*}Indicates a statistically significant p-value at p < .05.



These findings suggest that certain characteristics make an ad more effective. First, the ad must be interesting and creative. This is a common theme across all advertising but is particularly salient for teens as an advertisement competes for attention across platforms that dominate their cluttered media environment. Second, the ad must provide something important to "think about". While many commercial brands focus only on attention and likability, tobacco prevention ads must make teens think to be effective. Likewise, serious ads were rated higher. This suggests that messages that cause youth to think about tobacco use in a serious way may be more effective.

Lastly, individual factors not accounted for by the variables in the model still play a considerable role in determining effectiveness. Though the available data does not allow for further investigation, individuals could also find different ads appealing because of their unique characteristics, personalities, and different social influences.

Summary of Quantitative Findings

The previous section analyzed quantitative data from the VT teen focus groups. The exercises were designed to assess how teens evaluated specific ads and facets of effective ads. The ads rated most effective by teens were two that addressed the hard-hitting negative health effects of tobacco use (i.e., CDC's "Terrie Tips", NYC Health's "Reverse the Damage") and two that addressed animal testing in the tobacco industry (i.e., ydouthink's "Animal Testing Booth" and ydouthink's "Animal Testing Monologue"). These types of ads possess the key facets that teens related to effectiveness in convincing youth to live tobacco-free: made [youth] think, creative, serious, and interesting. Producing more ads and other strategies that combine these findings could result in even more highly effective messaging. Three funny ads, two of which were part of the truth® campaigns, "The Magical Amount" and "Fair Enough" and OVX.org's "Listen to Your Gut", were rated the lowest in effectiveness. It is clear that teens did not think funny ads were effective in convincing youth to live tobacco-free.



Qualitative Findings Part 3: Ads and Brands

Teens participated in several types of discussions during the focus groups, as described in the previous two qualitative findings section. First, teens were asked to discuss the various peer crowds they observe in their towns and schools. They were then asked about the activities that different peer groups engage in, including various health behaviors, such as smoking. Next, teens rated anti-tobacco advertisements for a quantitative exercise and discussed their thoughts regarding the ads with the discussion group. In this section, we discuss results from the qualitative discussion of the ads using direct quotes from focus group participants.

During the focus groups, teens participated in a discussion surrounding a collection of youth-focused tobacco prevention TV ads. Twenty different ads from various campaigns were shown, including ads from Vermont's OVX.org, ydouthink and American Legacy Foundation's truth® campaign, and a variety of other state/local health department's campaigns. For a complete list of the ads, refer to Table 4 on page 37.

Some trends were discovered through the ad discussion. There was a consensus across teens in different focus groups that funny ads are much less effective, often undermining the message they are presenting. To that effect, students made statements such as "I thought it was kind of, like, too silly to be a commercial talking about something that's really serious and I don't think it would be effective on smokers" (Male, Burlington), and "It was too funny. People wouldn't really take it seriously" (Male, Hannaford). It was also determined that when teens thought an ad was serious, emotional, or presented new or interesting information, it was perceived to be more effective. This is demonstrated by the following statements:

- "The more serious it is, the more it gets to you" (Female, Enosburg),
- "That made me sad...that affected me emotionally" (Female, Black River), and
- "I think that informative commercials, like if it were to say what tobacco products cause and how they affect you, I think that kind of gets to you more than [non-informative ads]" (Female, Burlington).

Teens are also affected by ads that show real people reacting to facts and/or street demonstrations; "I like how we saw [people], we were watching people's reactions to the things they were reading" (Male, Burlington). They also find serious information about social justice issues, such as animal testing and deforestation, to be interesting and effective in the context of anti-tobacco messaging. "The environment is really close to heart for me and I didn't even know this stuff. I mean, I knew it took a lot...I mean, I wasn't totally oblivious to the fact that they were using woodland and stuff like that, but I'm definitely going to bring it up to my mom because she is a huge smoker and she's even more crazy about the environment than me" (Female, Burlington).

On the following pages is a summary of the discussion for each ad shown during the focus groups.



Ad 1: ydouthink "Kiss"

Teens generally did not like this ad, although some, particularly females, thought it was "cute" and "sweet." Others did not relate to the representation of teens, saying, "I thought it was really obnoxious. Just, the music mixed with the...I don't know. High school's not like that. And kids, if they're gonna smoke, they're gonna smoke. And their girlfriend's probably gonna smoke, too" (Male, Burlington). Others did not care for the ad, but did agree with the sentiment; "I definitely can relate to the end, though. Kissing without the smell of tobacco is really nice. Like, if a guy smells like tobacco while I'm kissing him, it's like, blah" (Female, Burlington). Many agreed that they did not understand what the ad was about until the end, stating:

- "It'd be better if they told you it was an anti-tobacco commercial at the beginning. That way you can think about it the whole way through" (Male, Burlington), and
- "They should have said something [about tobacco] at the beginning" (Female, Enosburg).

Other suggestions for improvement included adding tobacco facts to the ad and "Maybe at the end of that commercial [they should show] a decayed mouth from smoking" (Female, Burlington). Overall, they stated that the ad was ineffective:

- "I really don't think it goes that well with getting people to stop smoking cigarettes" (Male, Hannaford), and
- "I don't really think...what it's going for, trying to make kids tobacco free...I don't really think it'd be that effective. But I think it's a creative idea" (Male, Burlington).

Ad 2: truth® "Do You Have What It Takes?"

Teens had a mixed reaction to this ad. Some appreciated the straightforward approach, stating:

- "It was pretty truthful. I liked it," (Male, Hannaford) and
- "I like that it wasn't telling you not to smoke, it was just presenting you with facts" (Male, Burlington).

Others were confused by the ad and misunderstood the intent, saying:

- "I thought it was weird. It wasn't that clear" (Female, Black River), and
- "I think it was more directed at the people who are selling the cigarettes than the people who are buying the cigarettes" (Female, Burlington).

The teens were also divided on the impact the ad would have on viewers, with some saying, "I think the people who smoke and chew would think that they're the half that isn't gonna die" (Male, Hannaford) and others saying, "It makes you think I could be that half of people who die" (Female, Black River). Additionally,



some thought effectiveness would depend on the age of the viewers, saying, "It depends on when they see it. If they're our age, they won't give a crap. If they're 30 and really decide they shouldn't be [smoking], it might hit them" (Male, Hannaford).

Ad 3: ydouthink "Animal Testing Booth"

Most teens liked this ad. They responded strongly to the unfamiliar concept of tobacco and nicotine being tested on animals, stating:

- "I am an animal lover, so obviously this hit me kind of hard. 'Cause, I didn't know that...I know about animal testing mostly for like random chemicals they put in beauty [products] and stuff, but I did not know that they were doing nicotine. It doesn't really make sense why they would be because [the effects of nicotine are] already established" (Female, Burlington), and
- "Dogs out here are your best friends. That's not cool" (Male, Hannaford).

The teens also liked the hidden camera style of the ad, saying:

- "I liked that they showed real people giving their thoughts, not just actors, and they showed real information" (Male, Burlington), and
- "I think that one hit me. It made me think a lot more because of the graphic detail. I like how we were watching people's reactions to the things they were reading" (Male, Burlington).

Despite the emotional reaction most teens had to the ad, some were still skeptical as to the relevance of the information, stating, "Even if you don't buy [cigarettes], the companies are still gonna [test on animals]" (Male, Hannaford).

Ad 4: Tobacco Free Florida "Icons"

(Note: this ad has been used by many states and was originally produced by the CA tobacco control program. However, the Tobacco Free Florida version was tested)

Teens were conflicted on the efficacy of this ad. Some reacted very positively to the health effects presented, stating:

- "I thought they pretty much hit it spot on, like a lot of tobacco companies do advertise that if you smoke, you'll feel cooler and all that kind of stuff, but in reality you will end up in the hospital" (Male, Burlington), and
- "I kinda wish I'd never started smoking because I don't want to be on oxygen when I get to be about that age" (Male, Hannaford).



Others, however, found the ad to be hyperbolic:

- "It made me mad because it's so exaggerated" (Female, Burlington);
- "I also feel like kind of it shows the extreme side of it. I feel like personally, when I would watch it, I'd be like 'OK, how many people actually go through that?' I feel like it's a little bit exaggerated" (Female, Black River);
- "It was all kinds of dramatized" (Female, Enosburg).

They also questioned the effect the ad would have on smokers, saying:

- "Smokers think that these cases aren't going to happen to them, so I don't think it's really going to affect most smokers" (Male, Burlington), and
- "A lot of people who smoke know that it's bad for them and they really don't care" (Female, Black River).

Ad 5: ydouthink "Pets' Health"

Teens generally disliked this ad. They responded negatively to the bright colors, tone, and the actress, saying:

- "I think this commercial was kind of dumb to be honest. It was just kind of cheesy. They could have done it cooler" (Female, Black River);
- "It was too bubbly. It reminded me of a Nickelodeon Jr. commercial" (Female, Burlington);
- "I think it should have been more serious. Maybe if you saw a dog that was actually suffering from it, saw it's face. All those [animals] looked happy" (Male, Hannaford).

Still, many teens did respond to the concept of animal suffering, saying:

- "It makes you feel kind of guilty. Like you're a bad person if you smoke and you have pets" (Male, Burlington);
- "Not only are you affecting yourself, but you're affecting an innocent animal that has no control" (Female, Burlington);
- "People always talk about how secondhand smoke affects children, but they never talk about the pets" (Female, Black River).

Ad 6: OVX.org "Listen To Your Gut"

Teens unanimously disliked this ad. They agreed that the ad does not demonstrate any effects that would discourage smoking among teens, stating:



- "It doesn't have an impact. It doesn't give any new information that we don't already know and there's nothing special about it" (Female, Burlington);
- "It's not the most appropriate way to show the effects of smoking. It's just showing them all having fun, then smoking happens, then nothing really happens" (Male, Burlington);
- "It should have shown more of the lungs' reactions" (Female, Black River).

They also felt that the ad was not serious enough for the subject matter; "They make it seem kind of light, so you don't really think about [it]...the other ones show you effects and this one, you don't really have an emotional connection to it. [Facts] make you think, but this is just people in costumes. It can't be treated like a joke, or people will think of it like that" (Female, Enosburg).

Ad 7: ydouthink "Animal Testing Monologue" (Male)

Teens tended to like this commercial. They felt the tone was appropriate for the subject matter:

- "It was serious and it did get my attention because he wasn't smiling, nor was he too sad. He was just serious" (Male, Burlington), and
- "I liked it because it was very straight to the point, there wasn't things distracting me, I could listen to the things the guy was saying and he was very descriptive with his wording, and it made me think and feel and want to change" (Female, Burlington).

They cited their love of animals as a reason why this ad would be effective, stating, "I think animals are something most people have kind of a weakness for. So if you use something like that, it's something everyone can relate to because most of us have pets. So you think 'What if that were my dog?' You know? I can't imagine. It's something people can relate to in their own lives" (Female, Enosburg). They also appreciated that the ad presented new information; "It was informative. I didn't know that they did that" (Male, Enosburg).

Ad 8: ydouthink "Deforestation Monologue"

This ad elicited a varied response from teens. They tended to respond positively to the messaging, stating:

- "I liked it because it had a different reason why smoking was affecting people and the things around people. Instead of animals, it affects trees" (Male, Burlington);
- "That one kinda puts into perspective. They say we don't have a lot of forest left and they're just wasting it" (Male, Hannaford);
- "I think it's terrible that they cut down that much [forest] in just a year; you have to think about the next generation" (Female, Enosburg).



A few doubted the truthfulness of the ad; "It was a little unbelievable, the statistics they had there. I mean, seven pounds [of wood] for one pack of cigarettes. I thought that was a little hard to believe. I don't know if it's true or not" (Male, Burlington). Similar to some of the responses to the animal testing ads, some teens questioned their ability to make a difference, saying, "It wouldn't make me want to quit. Just because if I quit, they're still going to make the same amount of packs of cigarettes as they were, whether I'm smoking or not. They're still gonna be burning all that wood if I'm smoking or not smoking" (Female, Enosburg).

Many had comments on the production quality of the ad, saying:

- "It all looked kind of fake from the beginning. You could tell there was a green screen she was just standing in front of" (Male, Black River), and
- "[The graphics] looked kind of cheesy" (Female, Black River).

Teens in more rural areas responded to the actress, saying:

- "It would be more relatable [if it was a hunter type teen] because at least then you know they go into the forest, not like some little girl from the city" (Female, Black River), and
- "She wasn't dressed for the outdoors" (Female, Black River).

Ad 9: truth® "Unsweetened Parade"

Teens had a mixed response to this ad. Many thought it was funny despite the subject matter, saying:

- "It was serious, but yet it was kinda funny. The people's reactions...but then it was serious because it shows what happens when you smoke for a long time. What happens to people isn't funny, but people's reactions to them if they've smoked a long time [are]" (Male, Hannaford), and
- "I think that had just the right amount of humor" (Female, Enosburg).

However, many questioned the appropriateness of the humor, saying:

- "It's ironic as hell, because they're up there looking all happy about it" (Male, Black River), and
- "I feel like it was very contradicting with the float and the song and the people" (Female, Black River).

Many thought that the overall effect would do little to motivate someone to quit, saying:

- "I don't think people that smoke think about this stuff" (Male, Hannaford), and
- "I feel like that would make someone not want to smoke for like a day, but then they'll forget about it" (Male, Black River).



Ad 10: truth® "Body Bags"

Teens responded positively to this ad. They thought the image of body bags was a good way to communicate the facts represented in the ad:

- "It really captured the scale of it. If it kills 1,200 people everyday, they brought body bags to show what 1,200 people really looks like. It was creative in the sense that it gave you a visual sense of what's going on instead of some other commercials that just give you a statistic and don't really make you see anything or think" (Male, Burlington), and
- "It's different between seeing the number and just hearing the number [of people who die from smoking]" (Female, Enosburg).

They also thought the ad would be effective; "I feel like that's something that could scare people. 1,200 people a day is a lot" (Female, Black River). Finally, they liked the style of the ad, stating:

- "I like the cinematography. It's very broad. It gives you that big scale feeling" (Male, Burlington), and
- "The visuals are good" (Female, Enosburg).

Ad 11: ydouthink "What's Hot?" (Both Male and Female Versions)

Teens had a mixed response to this ad. Some appreciated the variety of peer crowds; "I didn't think I was going to like it at first because I hate girls like that, but I liked it because it had a wider variety of style, so it was more appealing to a wider...I mean if it was all goths or jocks or hipsters...I like the diversity" (Female, Burlington). Others felt that the teens in the ad seemed inauthentic, stating, "I thought it was good but you could tell it was fake. They should use real people, not just actors" (Male, Black River). Some were put off by the message, asserting that most people do not care whether their partner smokes or not:

- "It was just girls. You look at people who do smoke who have girlfriends and are married and stuff.

 Just because a couple girls think it makes you hotter...who gives a damn?" (Male, Hannaford), and
- "I have a boyfriend and I'm still gonna do what I do" (Female, Black River).

Finally, there was some concern from the Black River students that they could not relate to the teens in the ad; "They all look like they live in cities. There were no rural looking kids" (Female, Black River).

Ad 12: ydouthink "Animal Testing Monologue (Female)"

Teens generally liked this commercial. In regards to the style of the ad, they said:

• "At the beginning it was neutral, it wasn't really on that sad side or good side. But then there's the point where you start seeing the pictures and she's stabbing the stuffed animal, it's like 'Oh my



God,' because in my head I was like, 'What if that was a real animal?' And then she starts talking about that's what happens. So it really got me thinking in that way. Plus, it was really visceral. It was very scary, so it evoked fear" (Male, Burlington), and

• "It covered in a commercial why I pay attention to those sort of commercials. It was straightforward. It had graphic pictures and it reeled you in and BAM! Those are the statistical facts, BAM! This is what is happening or has happened. I liked it" (Female, Burlington).

Teens also tended to like the actress in this ad:

- "She's aggressive. If you are talking about something serious, you should be serious about it," (Female, Enosburg);
- "She didn't seem fake about it" (Female, Black River);
- "She was pissed off, so it caught my attention" (Female, Black River).

Ad 13: truth® "The Magical Amount"

Teens did not like this ad, stating:

- "There's no chance that is going to get anyone thinking about quitting" (Male, Enosburg), and
- "I feel like if there was a skip button, people would use the skip button for this one" (Female, Black River).

They tended to be confused by the message presented, stating:

- "I was very confused through the whole thing" (Female, Enosburg), and
- "I didn't get it" (Female, Enosburg).

When asked what they thought the ad was saying, they said, "Unicorns don't exist, so there's no such thing as the magical amount" (Female, Enosburg).

Ad 14: Smokefree Vegas "Hookah"

Teens had mixed responses to this ad. They liked that it presented new information:

- "It was pretty good. I didn't know that" (Male, Hannaford), and
- "I didn't know that [shisha is tobacco]" (Female, Black River).

Some were doubtful of the facts presented, stating:



- "I don't know where they got their facts from. First of all, no one sits there and smokes a hookah by themselves, so they're not going to be smoking 5 packs of cigarettes. You share a hookah with, like, tons of people. And no one puts tobacco in a hookah" (Female, Enosburg), and
- "It just bugs me that when they say the equivalent [amount] of smoke, they make it sound really bad, but they don't mention that there's not all the nicotine and crap there is in cigarettes. It's like they lie to you to get you to not do it" (Female, Black River).

Also, they had mixed responses to the actress:

- "She's cute" (Male, Hannaford), and
- "The girl's voice annoyed me" (Female, Black River).

Ad 15: truth® "Fair Enough"

Teens did not like this ad. Some acknowledged that it was humorous; "If I saw it on TV, I would laugh, but you don't really get the point" (Male, Hannaford). Most teens, however, did not understand the message, stating:

- "I didn't understand any of that" (Female, Black River);
- "It didn't make any sense" (Male, Black River);
- "What the hell happened?" (Female, Black River).

Ad 16: ydouthink "Attractiveness" (Both Male and Female Versions)

Teens had mixed reactions to this ad. Many could relate to the teens and the messaging stating:

- "I can relate to [hating] coming home smelling like smoke" (Female, Enosburg);
- "They were video taping themselves so it seemed more personal" (Female, Enosburg);
- "The girls were realistically pretty and relatable" (Female, Black River).

Some found it to be unrealistic; "The first part with the boys...I don't know any guys who film themselves. Who does that? No one I know" (Male, Black River). Finally, there were some who were put off by the message, stating:

- "It doesn't affect me. We smoke, we have boyfriends who smoke, we don't know where they're coming from. I've had boyfriends who smoke, boyfriends who don't smoke, it's all the same to me" (Female, Enosburg), and
- "Put a couple smokers into it. Get somebody else's opinion. It irritates me that they're just showing nonsmokers" (Female, Enosburg).



Ad 17: CDC "Roosevelt Tips"

Teens had varied responses to this commercial. Some thought it was effective, stating:

- "It shows the effects, which it seems those ones seem to affect people more" (Female, Enosburg);
- "The part that hit me is that if I keep smoking I'm not going to be able to do as much with my kids" (Female, Enosburg);
- "We all think about our future, so I don't think it's anything that's unrelatable" (Female, Enosburg).

Some disagreed about the efficacy as it pertains to teens:

- "It was better for older people because it was really good about how, 'I can't play with my kids anymore.' Right now we're not thinking about being 45" (Female, Black River), and
- "Most kids aren't thinking about the future too much. Most of them are just thinking about what's happening right now" (Male, Black River).

Others felt that the information was a bit trite; "I feel like it was a typical anti-tobacco commercial. It was cliché" (Female, Black River).

Ad 18: NYC Health "Reverse the Damage"

Teens had a mixed response to this ad. Some thought it would not appeal to teens; "I think it's for an audience that is older" (Female, Black River). Others thought it was too graphic, stating, "I'm squeamish when it comes to blood. I didn't like that one. I understand what they're getting at putting the surgery into it, but that's a little over the top" (Female, Enosburg). Others thought that it was effective and relatable for teens, stating:

- "Sometimes too much detail is a good thing" (Female, Enosburg);
- "It was serious" (Male, Black River);
- "Who wants to go under the knife over a cigarette?" (Female, Enosburg).

Ad 19: Venomocity "Addiction"

Teens tended to like this ad. They liked the representation of addiction, stating:

- "It was an interesting visualization" (Female, Black River);
- "That thing right there was crazy" (Female, Enosburg);
- "I feel like people would be able to relate to that" (Female, Black River).



However, some were concerned that the ad did not do enough to discourage smoking, stating:

- "It made me feel like if you are craving a cigarette, just go outside and smoke and it'll all be ok" (Male, Black River), and
- "It should have showed him trying to spit out the cigarette and saying, 'I will not do that'" (Male, Black River).

Ad 20: CDC "Terrie Tips"

Teens expressed mixed feelings about this ad. They felt it did not present enough information; "They should tell you more statistics like, 'I smoked 3 packs a day and this is what happened to me'... because that doesn't just happen to everybody" (Female, Enosburg). However, some teens countered that statement by saying, "You don't know that you won't be an extreme case" (Female, Enosburg). Some others thought it would appeal more to an older audience; "It gets the point across, but then again to the older people" (Female, Black River). Some teens thought it would still be relatable to teens; "Teens really care about their appearance, so I think it'd be effective for teens, too" (Male, Black River). They also found the style of the commercial to be overdone, stating, "I think it's another cliché commercial" (Female, Black River).



Implications & Discussion

This section is designed to interpret and discuss the implications of the research findings on tobacco control strategies for youth in VT. We gathered data from both qualitative and quantitative exercises, resulting in multiple data sets to analyze, which include self-reported tobacco risk data, quantitative TV ads assessment, and qualitative TV ads discussion, amongst others. Together, the combined data sets provide rich and robust findings to understand which facts and strategies can effectively reduce tobacco use. The following implications have been compiled based on a combined analysis of these data sets to provide pertinent information on the best strategies for tobacco prevention in VT.

Reaching High Risk Teens in VT

1. Not All Teens Are At Risk For Tobacco Use

Our study began by looking at which teens were more or less likely to use tobacco. We heard during qualitative discussions that certain teens were unlikely to use any tobacco products while other teens were very likely to use tobacco products. Furthermore, the types of tobacco products used also varied. However, unlike tobacco control literature, which uses demographics such as SES, gender, and race to determine tobacco use risks, focus group participants were predicting tobacco use risk based on how teens dressed and the peer crowd affiliation they projected. This approach has been replicated in every study we have conducted on teen tobacco use and has led to the conclusion that we must look beyond demographics to truly understand teen tobacco use risk. Identity, peer crowds, and lifestyles can help truly understand which teens are at high risk and improve utilization of limited prevention resources.

2. Peer Crowds Are A Reliable Measure Of Tobacco Use Risk

We theorize that when teens assess the tobacco use risk of unknown peers in our picture exercises, they are projecting the tobacco use norms they observe in their community and the norms they believe they personally have to adhere to. As such, this information can be extremely valuable when designing tobacco prevention programs because it can define exactly which types of teens need to be reached. Peer crowds can help us organize the factors teens use to predict tobacco use risk. Across focus groups and schools, we found that teens created similar peer crowds and consistently predicted that certain peer crowds (i.e. Alternative, Hip Hop, and Country) were at higher tobacco use risk than other peer crowds (i.e. Mainstream and Preppy). Consequently, we are able to compare teen perceptions across the state due to significant congruence among the focus groups. This suggests that peer crowds can be used as a reliable measure of tobacco use risk in VT.

3. Country, Alternative, and Hip Hop Cultural Influences Account For Most Tobacco Use In VT

As noted in the study findings, teens consistently stated that the Country, Alternative, and Hip Hop peer



crowds all had higher tobacco use rates than the average teen. In terms of projected size, the Country, Mainstream, and Preppy peer crowds are roughly similar in size and tied for the largest peer crowds in Vermont. The Country peer crowd was consistently believed to be both large in size and high in tobacco use prevalence. Mainstream and Preppy, however, are low in tobacco use prevalence. Consequently, even though the peer crowds were believed to be the same size, teens tell us there are significantly more Country tobacco users than there are Mainstream or Preppy tobacco users. The Alternative peer crowd was small, but was predicted to have an above average tobacco use rate. Finally, the Hip Hop peer crowd was believed to be the smallest, but was believed to have smoking rates as high as the Country group. This finding leads us to ask, "Is it better to target specific peer crowds (large and small) with higher tobacco use rates, or larger peer crowds with lower rates?" Since most teens mix peer crowds influences (even if they are mainly influenced by a single peer crowd), we cannot look at each peer crowd independently. Instead, we must look at how peer crowd influences interact. We can do this by using a soup analogy where the ingredients represent the peer crowds and the final soup represents a teen's identity. In this soup, some of the ingredients are encouraging tobacco use, while others are neutral or discouraging tobacco use. If we can neutralize the ingredients that encourage tobacco use, then we can reduce tobacco use in the overall population. Teens consistently stated that Alternative, Country and Hip Hop culture promoted tobacco use. Consequently, we hypothesize that when these 'ingredients' are present in the soup, teens are more likely to smoke, even if Preppy and Mainstream influences are also present. But, if Alternative, Country and Hip Hop influences can be neutralized by changing the pro-tobacco norms, then teens are more likely to live tobacco-free no matter which peer crowds are in their 'soup.'

Improving the Effectiveness of Tobacco Prevention Ads

4. Authenticity is King

In many different ways, teens commented about the authenticity about ads. Some teens commented about the featured actress looking like a city girl, some others commented about how boys are not likely to videotape themselves. All these comments relate to the authenticity of the ads and its message. Regardless of which strategies are implemented in the future in VT, it is critical for ads tor reflect authentic high-risk teens, feature authentic messages, and represent authentic high risk peer crowds. Programs should avoid trying to reach all teens at once and instead focus on effectively reaching a single peer crowd. This decision will help ensure that the actors in commercials match the identity of those being targeted. Using reality ads with believably 'real" participants will strengthen ad impact even if some control is lost over the wording of the message. Ads that show "real teens" in the same peer crowd as the target group rejecting tobacco use for a good reason are likely to be more effective to reduce tobacco use among youth who identify with the targeted peer crowd.



5. Thoughtful, Creative, Serious, and Interesting Ads Rule

As noted in the quantitative findings, ads that were perceived to be thoughtful, creative, serious, and interesting were most likely to be rated as effective by teen smokers. While these ad facets were the strongest predictors of effectiveness, all other variables except one (funny) were also associated with effectiveness to a lesser extent. Funny was the only characteristic not associated with effectiveness, which was corroborated in qualitative discussions. Teens reiterated a point we have encountered in the past – that is, if we expect teens to take a message seriously, then the message should not be presented as a joke. This continues to be one of the most consistent findings of our multiple rounds of research in different states. Programs should avoid humor-based ads regardless of how appealing marketing agencies may perceive them to be. In addition, programs must focus on presenting messages in a thought-provoking and serious manner with interesting and creative executions. In a world where youth are bombarded with media messages, new and novel approaches will stand out and get the message across.

6. Reality Ads Are Overwhelmingly Preferred

Teens overwhelmingly prefer reality-based ads to other ad types presented. We hypothesize that this is in part due to the unique characteristics of this generation. Growing up targeted by sophisticated marketing strategies with often dubious intentions cause teens today to not trust advertising and have learned to ignore gimmicky sales tricks. They do not trust actors and recognize that there is someone behind the curtain paying them to present specific information in a specific way. In addition, TV programming over the past decade has shifted away from scripted shows to reality-based television. Once believed to be a fad, it is now clear that reality entertainment is here to stay with widespread teen appeal. The combination of these two forces makes reality-based advertising a powerful communication strategy to reach teens. However, this approach requires teens to perceive ads as reality and not scripted. Some of the ads, like the ydouthink "Animal Testing Booth," successfully came across as reality and were rewarded for it, while others, like ydouthink "Attractiveness," were often perceived to be scripted. Reality ads formatting seem to have the most potential to cause change, but authenticity will be critical for ads to be effective.

7. Reality Strengthens Many Messages

During the qualitative interviews, we observed that not only do teens prefer reality ads, but that facts become more powerful when presented in a reality-based scenario. For example, teens have often seen images of tobacco-related diseases. However, the CDC's "Terrie Tips" and NYC Health's "Reverse the damage, both rated highly in quantitative reports, demonstrated the hard-hitting, detrimental effects that tobacco use has on real people. Likewise, the ydouthink Animal Testing Booth ad showed the shock expressed by "real people" when they learned that the tobacco industry engaged in animal testing. Finally,



multiple teens also specifically commented on the reactions of onlookers in truth's "Unsweetened Parade" ad. Those demonstrations communicate more than just the fact; they also communicate social norms around tobacco use. Teens are not only told that "tobacco use cause diseases," but are also shown how others may react to them if they have those diseases. This example shows youth how to behave rather than simply telling youth how to behave. Due to the reality format, teens believe they are seeing real people express genuine disapproval of tobacco use, its health effects, and/or the impact of its production that shows them why they should care. Repeated exposure to these ads may not only relay the facts to teens but also teach them to care about the facts, which we believe is a benefit unique to reality-style ads.



Recommendations

Recognizing that the 13.3% teen smoking smoking prevalence in VT is already significantly lower than the nationwide smoking prevalence of 18.1%, we began this study by asking the following questions:

- Can the Vermont Department of Health effectively approach the remaining 13.3% of teens who currently smoke using the same strategies that were used to reach teens in previous years?
- Are teens who continue to use tobacco today different from the teens who were once at risk?
- If so, are novel approaches required to reach them?

This research study was designed to understand the identities of teens who continue to use tobacco in Vermont. Through this study, we have acquired a better understanding of which teens are currently at risk of tobacco use and why. We have also discovered which tobacco prevention facts and messages are most likely to reach those at risk teens. We combined our experiences in tobacco control in other states with the research findings from this study to develop the following recommendations.

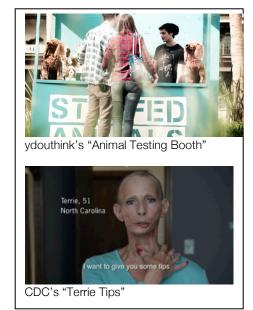
1. Discontinue use of humor-based ads

During this study, we tested OVX's "Listen To Your Gut" ad that focuses on humor-based messaging. Consistent with the quantitative analysis of ads characteristics, teens did not find the humor approach to be effective to prevent or reduce tobacco use. Teens appreciated serious and thought-provoking message presentation. While the "Listen To Your Gut" ad may be creative, the message of the ad itself was lost in the way it was presented and thus became ineffective. We recommend VDH to discontinue use of any humor-based ads to serious, thought-provoking messages that are presented in an interesting and creative manner.

2. Utilize authentic, reality-based messaging.

Reality-based commercials are perceived to be more effective and impactful that non reality-based ads, which is consistent with our findings in other states. ydouthink's "Animal Testing Booth" and "Animal Testing Monologue (Female)", CDC's "Terrie Tips", and NYC Health's "Reverse the Damage" all received high marks from teens and comments pointed to the reality-based execution. There could be a few reasons for this preference. First, it could be that teens today are skeptical towards manipulative marketing tactics and pay more







attention to reality ads because they are perceived to be more truthful. Considering that today's high school students have grown up in such an advertising-rich, multi-device, multi-channel environment, this is reasonable theory. Second, it could also be that the amount of reality-based television programming has led teens to prefer this type of ad execution, or at least made them more aware of what is "real" and what is "fake" from their perspective. Regardless of the reasons, VT teens believe that reality-based ads are more effective. However, it is critical for teens to believe in the authenticity of the reality-based execution. For example, the ydouthink "Attractiveness" ad was designed in a reality-based format but was not perceived to be effective because teens did not believe it was truly authentic.

3. Consider developing one or more campaigns that directly target high-risk peer crowds rather than a general "teen" campaign

Findings from this study provide strong evidence that teen tobacco use is concentrated within the Country, Alternative, and Hip Hop peer crowds, respectively. Considering the low teen tobacco use rate in VT, we believe this is one of the most important findings from this study. The Mainstream and Preppy peer crowds, while largest in size, represent below average tobacco use risk, both accordingly to our qualitative analysis and teens' own perceptions. To effectively reduce teen tobacco use in VT, it is critically important that campaign efforts minimize waste and target teens most at risk of tobacco use.

It is a common misconception that teen marketing campaigns reach all teens equally. Because of the cultural differences between teens, including interests, styles, slang terms, influences, music, and other culturally-defined factors, it is not possible to reach all teens with a single message. Often, campaigns that are believed to reach all teens actually only reach Preppy or Mainstream tens since those are usually the largest and most accessible group of teens. Unfortunately, this also results in campaign waste since those peer crowds are low risk for tobacco use.

In VT, as well as in many other communities where we have conducted research, teens who are most likely to use tobacco are the fringes of youth culture. The Country peer crowd is on the fringe of Mainstream teen culture, but since VT has a large rural area geographically, the Country peer crowd also represents one of the largest peer crowds, which is a unique finding in VT. Teens on the fringes of teen culture define their identity as different from the norm, dressing and behaving in ways specifically to be different from Mainstream or Preppy teens. Country, Alternative, and Hip Hop teens define their identity as anti-Mainstream and anti-Preppy in their own way, and tobacco use was a part of that identity formation and maintenance. Consequently, if a campaign is perceived to be designed for Mainstream or Preppy teens, those who need to be exposed to tobacco prevention messages are the ones most likely to ignore it.

Based on these findings, particularly the significant differences between the tobacco use teens perceive in each peer crowd, we recommend for VDH to consider implementing a campaign specifically designed to reach one or more high-risk peer crowds rather than Mainstream or Preppy teens. Since the Country peer



crowd is both large in size and have high tobacco use prevalence, it makes the most sense to develop a campaign targeted specifically for this peer crowd first. Based on information provided by teens, and taking into account the fact that some teens are influenced by more than one peer crowd, we estimate that a Country campaign could reach 30% - 50% of all Vermont teens (at varying levels). We can also reasonably predict that the vast majority of all teen chew tobacco users are concentrated within this peer crowd. Additionally, if additional resources are available, a targeted campaign for the Alternative peer crowd would also be effective to reduce teen tobacco use in VT since this peer crowd is at high risk. This peer crowd likely only influences 15% - 25% of all VT teens, but the smoking rates within this group are expected to be significantly higher than the state average. In addition, since these teens like to attend smaller rock shows in Burlington, they would be fairly easy to reach with a small, but highly targeted effort. Finally, while teens reported high tobacco use rates amongst Hip Hop teens, they also predicted it was a very small group in Vermont, possibly only accounting for 7% - 18% of all VT teens. Because this group is so small, it does not lend itself to efficient targeting with most marketing strategies. In addition, limited resources would have a greater impact reaching the larger Country peer crowd or the smaller but easy to target Alternative peer crowd.

Targeting a specific peer crowd influences every element of a campaign, including the brand name, imagery, facts, channels, and tactics. To be successful, it is critical to not simply place a campaign within a peer crowd. Instead, the campaign must be designed to feel like it originated from within the peer crowd itself. Consequently, we recommend completely separate initiatives to reach each of the peer crowds. This approach ensures that teens embrace the campaign and its messages to increase the likelihood of behavior change.



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