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Cigarette Smoking and Adolescents: Messages They See and Hear

SYNOPSIS

Cigarette smoking is the primary preventable cause of mortality and morbidity in the US. But in the mid-1990s, more than one-third of US teenagers were smokers, despite their awareness of the health risks and negative consequences of tobacco use.

In 1996, as part of a three-year qualitative study to explore differences in adolescent smoking by gender and ethnicity, members of the Tobacco Control Network examined messages that teens receive about cigarette smoking. Consisting of 178 focus groups with 1175 teenagers covering all levels of smoking experience, the study included teens from five ethnic groups, stratified by gender and ethnicity, from urban and rural areas across the US. The authors reviewed the sources and content of messages that teens reported were most influential in their decisions to smoke or not smoke cigarettes.

Family and peers, school, television, and movies were the primary sources for both pro- and anti-smoking messages.

The authors conclude that a lack of clear, consistent antismoking messages leaves teens vulnerable to the influences of pro-smoking messages from a variety of sources. Interventions need to be culture- and gender-specific. Family-based interventions appear to be needed and efficacious, but resource intensive. Building self-esteem may prove to be a promising intervention.

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Even though cigarette smoking is the primary preventable cause of mortality and morbidity in the US,[1] more than one-third of US teenagers identified themselves as smokers[2] in the mid-1990s. Smoking rates among African American males in high school doubled between 1991 and 1995.[3] Between 1991 and 1997, the prevalence of current cigarette smoking among high school students increased 80% among African Americans, 34% among Hispanics, and 28% among white teenagers.[2] Understanding the reasons for tobacco use among young American Indians, in particular, was important because national data indicated that smoking rates for both adult and adolescent Indians were higher than for any other major ethnic group in the US.[1] The reasons that up to 3000 US teenagers were becoming regular cigarette smokers each day continued to elude parents, teachers, health workers, and politicians.[4] These facts were especially troubling given that most teens appeared to be aware of the health risks and negative consequences of tobacco use.

Tobacco Control Network. In 1995, the Tobacco Control Network (TCN) was created as a research consortium by the Office on Smoking and Health, Centers for Disease Control and Prevention, to address issues about tobacco use among adolescents. Investigators affiliated with 11 Prevention Research Centers received funding to conduct a collaborative qualitative study of adolescents from across the nation about the functional value of tobacco use, what teens felt they got from smoking, or why they abstained. Learning what messages young people receive about tobacco use, where those messages originate, and the impact those messages have on the continued high prevalence of cigarette smoking among teenagers were major emphases of the study.

This report is derived from data from the three-year TCN qualitative study to explore gender and ethnic differences in adolescent smoking, a complex study on smoking due to the number of sites and participants and the challenges of analyzing the volume of data produced. TCN used a common qualitative methodology protocol in the first year of the study to understand the interpersonal, institutional, and media messages that influenced decisions about tobacco use among 1175 white, African American, Hispanic, American Indian, and Asian/Pacific Islander adolescents.

The TCN identified what these young people reported to be the sources and content of messages they received regarding reasons to smoke or not to smoke cigarettes, and which of those messages they believed to be most influential in their rejection or adoption of tobacco use. The intent in examining these data was not to establish causation between information and behavior, but to identify key sources of information that adolescents believed were more influential in creating an environment that facilitated or prevented their smoking behavior.

Mass media. Because the mass media are potentially the most easily altered sources of messages, they are the communication mode typically targeted for study of tobacco control.[5] Researchers have found links between sports promotion and tobacco use, especially in product marketing related to stock car racing.[6] Cigarette advertising campaigns are known to target females and African Americans.[7] Media antismoking campaigns aimed at preventing initiation of cigarette use have been effective compared with other strategies, such as school-based interventions.[8-11] Caution should be exerted, however, in making broad assumptions about the validity of measuring media exposure among adolescents. One study found that teens who were outside the broadcast area of an antismoking public service campaign and were unlikely to have seen it nevertheless reported recall of its messages.[12]

Because most young people who do not smoke cigarettes report the primary deterrent to be health concerns, the impact of media messages on health has been studied and recommendations made to teach young adolescents the skills to review the media critically and to make healthy behavior choices.[13-14] A weak relationship has been reported between the standards that teens establish for their own lives and their observations of adolescent experiences with peers and family on television.[15] However, when coupled with school intervention programs, mass media antismoking campaigns can be an effective method for communicating with high-risk teens,[16] particularly adolescent girls.[17]

Peer influence. The influence of friends on adolescent smoking behavior has been well documented,[18-24] especially among girls[25] and Hispanic teenagers.[26] Using the Teenage Attitudes and Practices Survey data, Wang and colleagues found that the strongest social environmental risk factor for smoking among 14- to 18-year-olds was the smoking status of best male or female friends.[27] Peer group affiliation, including the implicit (implied) and explicit (seen or heard) messages received from peer groups, was found to be closely related to cigarette smoking behavior.[28-29] There is some evidence that the extent of peer influence may vary by ethnicity.[30] Having peers

who smoke was especially predictive of cigarette smoking by white adolescents, but not for African Americans.[30]

Family influence. The literature is mixed on the relative influence of parents on teen smoking behavior. Parental influence has been recognized as an important predictor of adolescent smoking, especially when parents neglected to express concern about future smoking to young people who experimented and progressed to regular smoking.[18,21,31,32] Ineffective parenting behaviors, such as lack of communication, linked with parental use of tobacco have been found to be related to adolescents smoking cigarettes.[31,33] Positive parental interactions with their children were found to be protective behaviors against smoking,[34] and parent-family connectedness has been shown to be a protective factor for adolescents against other health risks.[35] On the other hand, the ineffectiveness of parental influence also has been reported.[27] Parental influence also appears to differ by ethnicity.[30] African American parents seem to have more influence on the smoking behavior of their children, at least in the early adolescent years, than do white parents.[30]

METHODS

The majority of studies conducted on teen tobacco use available to guide the Tobacco Control Network at the time of its study were primarily quantitative studies about the determinants of smoking. The qualitative studies were often limited in numbers of interviewees and typically located in one geographic location. As the TCN investigators began planning the study, it became apparent that to fully understand the reasoning behind the prevalent use of tobacco by adolescents, qualitative research would be the mechanism most useful in capturing the often unanswered "Why?" of teen smoking. While the investigators brought to the table wide-ranging experiences in tobacco research, many were skilled in qualitative analysis methodologies. A focus group methodology was chosen to maximize the number of individuals who could be interviewed across the sites.

One site (University of Illinois, Chicago) managed an Internet ListServe for the investigators and served as the coordinating center. The specific methods used in the overall study are described in detail elsewhere.[36-37]

The reasons that participants did and did not smoke (functional value),[36] the places where they smoked (social context),[38] and the images they held about smokers[39] are reported elsewhere. Data for the current study were analyzed by race/ethnicity, gender, and geographical location. Responses given in the focus groups were analyzed by a common protocol to determine the similarities and differences of responses across sites. While TCN initially considered using grounded theory as the methodological basis for the analysis, the need to be able to aggregate responses led to the decision not to attribute the complex cross-site analysis to this method.

Participants. In year one of the study (1996), 178 focus groups were conducted in 11 states with 1175 adolescents, ages 11 to 19 (Table 1). Participants represented all levels of smoking experience, categorized as "Never

Table 1. Focus group distribution by site and ethnicity

Location	*Rural or urban*	*African American*	*Hispanic*	*American Indian*	*White*	*Asian/Pacific Islander*
Alabama	Rural	7			6	
Illinois	Urban	7			5	
Maryland	Urban	9			8	
New Mexico	Rural		20	17		
North Carolina	Urban and Rural	8		2	3	
Oklahoma	Urban			16		
Missouri	Urban	4			4	
South Carolina	Urban	12			7	
Texas	Urban	9	10		5	
Washington	Urban					6
West Virginia	Rural				13	
Total groups = 178		56 (31%)	30 (17%)	35 (20%)	51 (29%)	6 (3%)

smoker," "Experimenter," and "Current smoker" (Table 2). Distribution by race/ethnicity was African American (31.5%), Hispanic (16.9%), American Indian (19.6%), white (28.6%), and Asian/Pacific Islander (3.4%) (see Table 1). The mean age was 14.5 years, 54% were female, and 44.7% were current smokers. Overall, 71.1% had smoked or tried smoking previously (even one puff).

"Never smokers" were defined as adolescents who had never smoked even one puff of a cigarette. "Current smokers" had smoked at least once (even one puff) in the past 30 days. "Experimenters" had tried smoking previously, but not in the past 30 days. All respondents self-selected their status, with the potential for misclassification.

Participants were recruited primarily from area schools at each site, using a network of school counselors and administrative personnel.[37] Three centers recruited through teen community organizations by using consultants from less accessible ethnic groups (such as Asian/Pacific Islander communities), or by employing a professional recruiting agency (in Chicago). The groups were to be stratified by smoking status, but this could not always be accomplished in academic settings, especially in small schools, without violating the confidentiality of smokers who did not want school officials to know they smoked. The participants self identified their smoking status prior to group assignment, but occasionally during the discussion or when questioned about tobacco use in the exit survey it became apparent that a few who initially declared themselves to be nonsmokers actually fit the study criteria of experimenter or even smoker. Some participants who smoked but initially identified themselves as nonsmokers did so on the basis of considering themselves "social" smokers (that is, at parties).

Data collection. Consent forms were distributed in advance to students who chose to participate, and the forms (signed by students, and often by a parent or guardian) were collected prior to the group sessions. The focus groups typically were conducted during school hours by university graduate students trained in qualitative methodology and the study protocol. Most of the moderators matched the gender and ethnicity of the focus groups they conducted. The sessions, which lasted from 40–90 minutes, were either audio taped or videotaped at all sites. The interviewers used a common protocol for data collection, which included a core set of semi-structured questions, to provide information that could be analyzed across the sites (Table 3).

Data coding and management. Transcripts of the focus group were reviewed against the tapes for accuracy, typically by the individual who conducted the session. Each transcript was coded according to a shared protocol and codebook developed by the investigators. Reliability of coding was established both within and across sites. Within sites, transcripts were coded for content by at least two independent coders. The data were entered into QSR-NUD*IST, a qualitative data analysis software package.[40]

Data analysis. The use of a common protocol and field guide permitted cross-site examination of the interpersonal, institutional, and media messages that might influ-

Table 2. Focus group distribution by ethnicity, gender, and smoking status

	Male				*Female*				
Ethnicity	*Never Smokers*	*Experi-menters*	*Smokers*	*Mixed*	*Never Smokers*	*Experi-menters*	*Smokers*	*Mixed*	*Total*
African American	8	2	11	5	12	2	7	9	56
Hispanic	5	0	5	5	5	0	5	5	30
American Indian	8	0	9	0	8	0	10	0	35
White	8	1	8	7	6	1	11	9	51
Asian/Pacific Islander	0	0	0	3	0	0	0	3	6
Total groups	29	3	33	20	31	3	33	26	178

Never smokers = Majority of youth in group had never smoked a cigarette, even one puff
Experimenters = Majority of youth in group had previously tried smoking cigarettes, but not in the past 30 days
Current smokers = Majority of youth in group had smoked cigarettes at least once in past 30 days
Mixed = Group consisted of a combination of never smokers, experimenters, and smokers, such that no one category comprised a majority

ence a teenager's decision making about tobacco use (see Table 3). The sources of the messages were subcategorized into the major areas of influence (Figure). Sources such as family, peers, and school emerged as having a significant influence, while other sources were cited inconsistently or insignificantly, such as workplace messages and point of purchase advertising. The influence of pro-smoking, antismoking, and mixed messages was also explored.

Matrices representing the research questions of concern for the current study of messages were generated by indexing the common codes in NUD*IST. Each site examined its data to identify the pertinent concepts or themes by gender and ethnic group, and supplied representative quotations from participants. While NUD*IST provides a rough measure of frequency, some overlap existed among categories (for example, messages from coaches could be coded as "school" or "non-family adults," or both). The investigators decided not to report frequency counts because they believed frequencies would be interpreted inappropriately as absolute counts of numbers of times that participants commented on a subject, a task not possible from group conversations.

Table 3. Core structured questions asked of focus groups about smoking messages

General	Let's go over what you have seen and heard recently about tobacco. Who wants to share an example?
Interpersonal	• What would your parents do if they caught you smoking? • How would you feel smoking in front of your neighbors? • How would you feel smoking in front of church members? What would they do or think about you? • Have you talked to anyone (like friends or relatives) about smoking?
Institutional	• Where do you smoke? • Where can you NOT smoke? • How do you know the differences in these places and times?
Media	• Let's talk about what you've seen or heard about cigarettes from billboards, radio and TV, counter-advertising, cigarette packages, stuff you can get from cigarette makers. Who wants to go first? • Here is a picture of an advertisement about cigarettes. When you look at it, what comes to mind?

NOTE: Many additional message-related responses were found throughout the interviews and were captured in the process of coding and analysis.

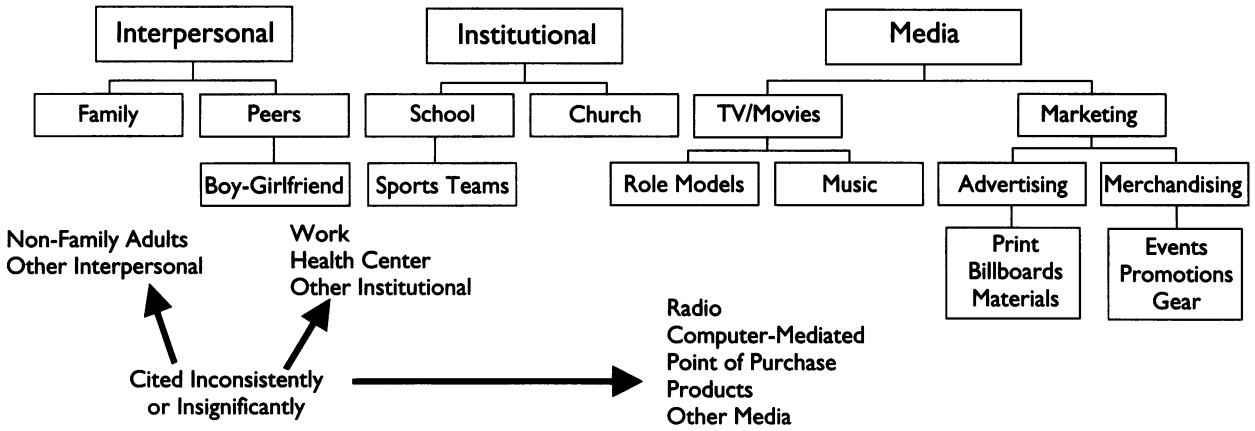
One site (Birmingham) received all the results and combined them into primary categories of pro-smoking, antismoking, or mixed messages to build a comprehensive picture of the responses of each ethnic group by gender. In this effort to determine the importance of the messages, which were stratified by race, ethnicity, and gender rather than by frequency counts, each research team was asked to assign a measure of saliency (a subjective weight independent of frequency) that was based on how strongly respondents from the site resonated to each theme that arose during message categorization. In some cases, the focus group transcripts were re-reviewed for clarity in determining the weight to be given the saliency measures. Saliency assignments from all sites were combined to identify the type and significance of messages that supported or opposed cigarette smoking, as reported by the adolescents in each race or ethnicity and gender group. Because of their small numbers, 40 Asian/Pacific Islander participants, including Samoans, Vietnamese, and Mien, were not identified by individual ethnic group. Similarly, American Indian respondents were not identified by tribe.

FINDINGS

Participants reported that family and peers were the primary sources of their interpersonal messages. Non-family adults were cited inconsistently or given insignificant weight on the saliency matrices. Institutional messages came primarily from school and church and, to a lesser degree, from the work place or health delivery systems. Media messages were related primarily to television, movies, merchandising campaigns, and print advertising. Messages generated by radio, computer (internet), or point of purchase were rarely cited. Mass media messages about tobacco appeared to significantly affect these participants' personal smoking behaviors and brand choices.[41]

Messages from family. Males and females in all racial and ethnic groups reported receiving most messages—

Figure. Sources of smoking messages



both antismoking and pro-smoking—from their families, but the messages frequently seemed unclear or were deemed hypocritical. Unless a clear antismoking message was given by the parent(s), the teen often interpreted it as "permission" to smoke, or an expression of disinterest.

Punishment for smoking was reported as inconsistent, judging by the range of consequences reported (from "I'd be grounded" to "They'd kill me"). Among African Americans and Asian/Pacific Islanders, smoking often was linked with values related to morality and religiousness. While some teens, particularly the Asian/Pacific Islanders and African Americans, realized that exposure of their smoking to their parents would place them "in a lot of trouble," the punishment was more often perceived by the white teens to be inconsequential or not to be taken seriously as a deterrent. When rules were set, however, teens resented the intrusion on their "free choice," and reported that they would be more likely to smoke to rebel, even though rebellion was not given by this cohort as a major reason to smoke.Pro-smoking messages were often implicit (not verbalized, but implied by modeling) and described primarily as observations of other family members smoking, but they also included being given permission to smoke with family members at home.

- *My mother doesn't care. She thinks, you know, if I want to make that decision it's fine.* (White female from Alabama)
- *My cousin, he, like, 'go ahead and smoke—it's in your genes.' 'Bout everybody in my family smokes.* (African American male from South Carolina)

In some cases, participants were initiated into tobacco use by parents, older siblings and other family members (cousins, uncles) who supplied them with cigarettes.

- *Yeah, after a while your parents get used to it and start buying you packs here and there.* (White male from Maryland)

Males. Males in all ethnic groups reported receiving family messages against smoking. Hispanic and Asian/Pacific Islander males in this study were even more likely to report hearing antismoking messages from their families than African American males.

- *They talk about your lungs. They be trying to give you lectures, man. That's what my brother be doing.* (African American male from South Carolina)

White males were the least likely to report family as the source for antismoking messages. They were second to Hispanics in identifying family as a source of pro-smoking messages.

- *Well, the person that actually got me started smoking, I saw my mom smoking. She smoked all through when I was a little kid growing up [and] I just started picking up butts she threw on the ground.* (White male from West Virginia)

American Indian males reported few antismoking and many mixed messages, which were influenced in part by traditional use.

- *How can they say something? I mean I know how they can. But why do they say something to us if they smoking themselves*? (American Indian male from North Carolina)
- *They know I smoke, they just don't pay attention to it.* (White male smoker from Missouri, representative of many respondents about their families)

Asian/Pacific Islander and African American males usually said they expected serious physical punishment if caught smoking. White, American Indian, and Hispanic males reported less fear of physical punishment.

Females. In all ethnic groups, more females than males reported hearing more antismoking messages from their families than from other sources. Those females who received pro-smoking messages appeared to be from families in which one or more parents smoked. An African American girl from Maryland characterized the attitude heard across all ethnic groups:

- *My mother knew I was smoking...she said she'd rather know what I'm doing than for me to be sneaking around.*

Hispanic and American Indian girls also heard a high number of mixed messages. Other parents also sent mixed messages:

- *She [mom] don't like me smoking, but she'll buy my cigarettes.* (White female from Texas)
- *My mom smokes every once in a while and her thing is, 'If you're going to smoke, please smoke the lightest you can...do the minimum amount of damage.'"* (African American female from Illinois)

Compared to other high-risk behaviors, smoking was often considered to be the least detrimental:

- *Dad sees it as 'At least she's not smoking weed.' It's a little habit – you'll grow out of it, it's okay.* (Hispanic female from Texas)

The antismoking messages from families that females reported often involved only implied threats of punishment.

- *For real, I would get killed next time because I got caught twice. Three strikes you're out. The second time I was almost killed.* (White female from Maryland)

They also voiced concerns about projected health risks, typically tied to the family's experiences with smoking related illnesses. Religious beliefs also were evident in some girls' reports about family antismoking messages:

- *My dad yells at me. He throws the Bible in my face, he does.* (Asian/Pacific Islander female)

Messages from peers. Most participants in all ethnic groups cited peer pressure and "fitting in" as the main reasons to try or to start smoking. They also reported a strong belief that the decision to smoke or not to smoke is an individual choice. Both males and females verbalized that if their friends did not offer them cigarettes or encourage them to smoke, they would be less likely to start. However, many also reported that if they chose not to smoke, they would not lose the friendship of others who continued to smoke. They were also cognizant that if they chose to remain nonsmokers, they would eventually find other nonsmoking friends.

Males. Among males, peer support for starting to smoke was more frequently reported by Hispanic and white adolescents.

- *I get teased if I don't try it.* (Hispanic male from New Mexico)
- *I don't think any of us just looked at a cigarette and decided to pick it up and smoke. I think anytime someone smokes it is because of peer pressure.* (White male from Texas)
- *You get two smokers together and you don't know 'em, it's kinda' like we're friends, you know...you're bonded for life.* (Alabama white male)
- *If your friends are trying to make you smoke, you might be a little more about to smoke than if they wasn't saying nothing.* (White male from Missouri)

American Indian males were most likely to report antismoking support from peers, although one New Mexico male said:

- *They just keep pressuring you until you give in.*

The messages from male peers were typically clear and rarely ambiguous (mixed messages).

Females. Females also reported high support from their peers in favor of smoking. An African American female from North Carolina summed up many girls' feelings:

What attracted me to Marlboro was that in the magazines they had cowboys in those real tight jeans. (American Indian female from Oklahoma)

- *If your best friend is smoking, you're going to smoke, too.*
- *We all go to this one certain place at her house and we just sit there and we smoke and we talk...we get closer, I think.* (White female from West Virginia)
- *They just start calling you a punk and say you can't hang out with them and you're not cool enough to be their homeboy or homegirl or whatever.* (Hispanic female from Texas)
- *Well, I don't have no friends that tell me don't smoke... they be telling you* to *smoke.* (African American girl from Maryland)

The number of white females reporting on the influence of peer messages, for or against smoking, was lower than for other ethnic groups.

Institutional messages. Schools and, to a lesser extent, churches were reported as sources of messages about smoking, but these messages were often perceived by the participants from all groups as inconsistent or hypocritical. Respondents often mentioned receiving antismoking messages from teachers who themselves smoked. They were aware of their school's formal policies about nonsmoking, but reported that they were not enforced, or were enforced inconsistently. They spoke about double standards existing for teachers, as well as for athletes and privileged others. They reported that school employees often looked the other way when they observed students smoking, and that teachers sometimes even bummed cigarettes from students or, in isolated circumstances, allowed smoking in classrooms.

Some participants reported their church or spiritual connections as significant influences in their lives. Many of the nonsmokers in the study reported active spiritual lives, particularly rural participants. Few smokers and nonsmokers, however, reported receiving information about tobacco use from their religious groups. Strong antismoking messages from religious organizations were either absent or conspicuously underreported.

Males. African American males reported receiving more pro-smoking and mixed messages at school than did other young people.

- *I smoke mostly at school...in the bathroom.* [readily evident to the on-site interview team] (African American male from Alabama)

Some teens from many sites reported that having teachers who smoked in front of students and ignored school policies related to students smoking on school grounds.

- *One teacher used to bum cigarettes off us every morning.* (White male from Missouri)
- *We've got shop, right?...he's sitting in the classroom smoking, burning wood up.* (American Indian male)

Some schools were more diligent in enforcing antismoking policies than others.

- *If you even carrying a lighter, they'll suspend you.* (Hispanic male from Texas)

Some white males, especially in rural areas, reported use of smokeless tobacco as a way of managing their nicotine addiction during class hours.

Females. Females from most sites were more likely to report receiving antismoking messages at school than were males, but they were as vocal as their counterparts about the hypocritical nature of these messages.

- *The teachers at my school is all Christians, yet all my teachers smoke.* (African American female from North Carolina)
- *I've seen teachers in their cars, like, smoking...and they say, 'Y'all shouldn't smoke'...I mean it's stupid to even tell us.* (White female from Texas)
- *It's like you walk past the teachers' lounge and all the smoke leads from there, you just smell it.* (African American female from South Carolina)

- *Oh, please—half of them walk outside and smoke, or smoke out their window in their classrooms.* (White female from West Virginia)
- *He [teacher] knew all of us smoked. He'd let us out four minutes early and he'd stand there and let us smoke.* (Hispanic female from New Mexico)

Messages from the media. Responses about the messages received from the media were coded as implicit (observations, such as actors smoking in movies or on television) or explicit (audible, visual, or printed messages, as in tobacco industry marketing efforts). Tobacco industry advertising and marketing campaigns were frequently cited by participants as sources of pro-smoking messages. Few participants reported seeing antismoking public service messages in the media.

Television and movies. Participants in this study generally denied that advertising influenced their decisions to smoke but, at the same time, discussed being affected by the pervasiveness of smoking in the media, and by the desirable images portrayed by smokers they had seen in movies and on television. They often cited role model behavior, depicted by professional actors and musicians, as influential in forming favorable images of smoking and smokers and in leading younger children to start smoking. The lyrics of music, as well as the personal behavior of the performers, were cited as sources of pro-smoking messages.

Males. Males in all groups perceived far more pro-smoking than antismoking messages in the media, especially in television and movies.

- *The movies and TV really glorify it...the lead characters...if they're supposed to have a certain attitude or a certain place in society they make them smoke.* (White male from Missouri)
- *Watching John Wayne, he'd drop his cigarette...'pow, pow, pow'...he's cool, man, smoking a cigarette and shooting somebody.* (Asian/Pacific Islander male from Washington State)

Females. Similarly, females reported receiving strong pro-smoking messages from television and movies.

- *Juliette Lewis* [in the movie] Natural Born Killers [released at the time of the study]. *She's real skinny. She's not really that pretty, but it's just like her whole essence. Her cigarettes help the whole thing. I think it does have an appeal...an attitude...more of a 'Don't mess with me'-like sex appeal.* (White female from North Carolina)
- *I bet can't nobody go through the day watching TV without seeing somebody smoke cigarettes...on TV and movies it be smoking everywhere.* (African American female from Missouri)

American Indian girls, however, also reported receiving many antismoking media messages.

Marketing influences. Both males and females from all groups commented on the pro-smoking influences of tobacco industry marketing efforts, which included print and billboard advertising (interviews took place prior to the billboard ban) and merchandising through events, product promotions, and gear.

- *You know, 'Here, smoke five hundred cases of cigarettes, here's a key chain—good job.'* (White female from Illinois)
- *You have a lot of like, ads, where you can win prizes if you keep smoking them...they have catalogs and all the Camel stuff you can buy. My friend who smokes would say 'You get free stuff,' but I wouldn't think of that as a reward. I think of it more as a death sentence.* (White male from Illinois)
- *What attracted me to Marlboro was that in the magazines they had cowboys in those real tight jeans.* (American Indian female from Oklahoma)

Respondents from all groups readily recalled advertising campaigns specific to certain brands and knew which brands different ethnic or gender groups preferred.[41]

Females from all groups commented on the messages that cigarette advertising conveys about body image, but none personally admitted they smoked to control their weight. This finding led the TCN to carefully review the (low) proportion of females being sampled from higher socio-economic strata, which may account for this unexpected finding.

- *They make it look glamorous...like you'll be skinny...and they have, like, really pretty girls.* (White female from Missouri)
- *If you smoke, you're strong and pretty...you're going to be a cool person.* (Hispanic female from New Mexico, regarding images on billboards)
- *They always show those nice lookin' women...and they think 'If I smoke I'll look like that.' Yeah, and the man*

and a woman hugged up and both of 'em got a cigarette smokin'. (African American female from Alabama)

The Asian/Pacific Islanders, especially Samoan teens, were quick to state that they did not accept the "skinny woman" body image.

Some young people reported having seen cigarettes in television commercials, a form of advertising banned since September 30, 1970, long before any of these participants were born. This mistaken recollection was characterized by the comment from an African American girl from Illinois:

- *In very small writing at the bottom of the screen or like at the end of the commercial real fast they say 'Surgeon General's warning, may cause cancer.'*
- *Every time you watch TV you see these commercials coming on where it's supposed to be so cool to smoke and whatever...the Newport commercials, they got the twins, they be all smokin'.* (African American male from Maryland)

The Surgeon General's message received frequent unsolicited comments from many sites, with mention of the "unimpressive" size and text of notices on cigarette packs, in magazine advertisements, and on billboards.

- *Warning labels should be jumping out at you. The main thing you see is the people and the cigarettes—cool people smoking. But it's not like that.* (American Indian male from Oklahoma)

These teen-agers were aware of the health risks of tobacco use and the potential long-term effects on their health, but saw smoking as without immediate consequences other than temporary coughing and nausea. Interestingly, it was the males who recalled most frequently the Surgeon General's messages, especially that "women should not smoke when pregnant." For the most part, the respondents appeared to be desensitized to the notices and tended to ignore them. They agreed that the Surgeon General's warning is "important" but, because it is not "in big writing" and presented in more forceful language, "People don't pay attention to it."

DISCUSSION

Young people from all ethnic groups reported that the strongest messages about smoking come to them from family members and friends. Movies, television, and other tobacco product marketing methods were secondary influences. The respondents were very aware, however, of the smoking status of public personalities, especially those in the entertainment industry, and could discuss in detail the smoking messages in popular music and movies. They were also acutely aware of contradictory institutional messages about smoking—most notably from schools. Ethnic and gender differences arose with regard to sources and credibility of messages, as well as awareness and impact of advertising. White females, for example, were strongly aware of advertising themes addressed to them, especially those related to body image. In the data analysis of the overall study,[36] however, smoking to manage weight was not given as a strong reason to smoke.

Because adolescents hear messages about smoking most frequently from family, parents bear the first-line burden of responsibility for communicating antismoking messages to children. Family members are not always prepared to address pro-smoking influences generated by adolescents' peers and the media and to provide emotional support and guidance to the young. They are not delivering clear consistent messages about the danger and inappropriateness of smoking behavior. According to participants, many mothers and fathers, especially white parents, appear to view cigarette smoking as a temporary experiment or a "rite of passage." Teens reported that some parents view tobacco use as being of less consequence than the use of other drugs, including alcohol, and typically consider it to be less harmful than sexual activity.

Even when family rules are established, they apparently are not consistently communicated to children by parents or are not enforced. A notable exception to this was reported by Hispanic teens and, to a lesser extent, African Americans. Many young people anticipated inconsequential punishment, or no consequences, for infractions of parental rules or preferences for their children about tobacco use. Concern about adolescent rebellion against authority or teen-agers' abilities to make adult-like decisions about their own behavior in regard to cigarette smoking or other risky behavior is valid, but is still not well understood.

Because parents cannot be expected to have knowledge of all aspects of their children's lives, schools and churches also have a role in providing clear, consistent antismoking messages. This survey indicates that schools are not uniformly enforcing rules and consequences for all students, nor penalizing school employees who fail to enforce or abide by nonsmoking rules. In addition to

Well, the person that actually got me started smoking, I saw my mom smoking. She smoked all through when I was a little kid growing up [and] I just started picking up butts she threw on the ground. (White male from West Virginia)

offering prevention programs, schools have an opportunity to provide counseling and cessation programs for young people who are addicted to nicotine. These programs would be strengthened by active family and community involvement, including churches.

As frequently reported and supported by the overall Tobacco Control Network data,[36] most of these young people reported knowing the long-term risk factors related to smoking, and nonsmokers frequently reported abstinence from smoking because of health concerns. Nevertheless, the attitudes most commonly expressed were: "It won't happen to me," or "Only old people who smoke a lot and for a long time get sick from smoking—and I'll quit before then." Both smokers and non-smokers commented on their negative image of smokers and their undesirable physical characteristics, such as bad breath, smelly clothes and hair, and discolored teeth. Few antismoking campaigns, however, focus on the short-term health effects of smoking, such as risk of addiction and the ingestion of harmful ingredients (acetone, ammonia, and carbon monoxide) in cigarettes and their smoke. Because participants in the overall study were very clear in their awareness of the properties of tobacco that helped them manage or reduce the stress in their lives,[36] components of antismoking campaigns should include strong messages about the harmful characteristics of tobacco properties and should provide adolescents with skill building in stress reduction techniques.

Government intervention. Many individuals and organizations have voiced their desire for effective governmental intervention into the problem of adolescent tobacco use. Demands have been made by tobacco use prevention and cessation advocates that government encourage changes in the portrayal of smoking in the media by excluding smoking among role models and including strong, clear health warnings, particularly emphasizing short-term effects of tobacco use. The need for new laws bearing strong sanctions against underage access to and use of tobacco are discussed daily by local, state, and national governments, but even when laws are passed (as in Alabama) and the penalties for infractions are severe, resources to provide enforcement often are not forthcoming. Rarely did any respondent in this study, even those living in communities with laws against adolescent purchase or possession of tobacco products, comment on the fact that their possession or use of tobacco, especially in public places, was against the law. This was true even in communities where such laws had been in place for two to three years prior to the interviews. Because the role of parents is critical to decisions about adolescents' use of tobacco, any law passed needs to support the family's role in reducing tobacco use and preventing teen access to tobacco products.

Limitations. Qualitative studies are always limited by their lack of reliability and generalizability of the data, and by the potential for respondents to give answers they believe will please the interviewer. Although almost 1,200 young people participated across 11 sites, they were volunteers and may not be representative of the majority of adolescents in the US. Despite using well-documented definitions of smoking status, the potential for misclassification exists, especially when relying on the respondents to self-select their status.

While the Tobacco Control Network used a common protocol to collect and analyze the data, moderators and staff at the sites were potentially influenced in the interviewing and analysis process by issues and approaches individual to their personalities, experiences, and locale. For example, the person interpreting data at one site may have had knowledge of unique local customs that could have influenced teens' responses and assumed that interpretation, without validation by the actual responses from participants. The data analysis procedures were complex and some specific ethnic and cultural differences may have been insufficiently articulated, given the limited numbers representing different American Indian tribes and Asian/Pacific Island cultures. That the site data were pooled and summarized by the senior author for final

analysis may be perceived by some to be a limitation; however, each site reviewed and agreed upon all interpretations presented in the final analysis.

CONCLUSIONS

The sources from which teens received smoking-related messages were generally similar in this study across gender, ethnic groups, and sites. Participants reported that the most salient sources of messages that led them to smoke cigarettes were from their peers and families. Pro-smoking messages from the media appear to help support the social norms that teens rely on to "fit in." Initiation into tobacco use frequently was attributed to family members and close friends. Messages from family, therefore, are very important to teens' decision-making processes. While some recounting of experiences with tobacco use reflected a strong, family-centered foundation against cigarette smoking, many teens reported a general lack of nurturing and guidance from parents and other adults in their lives, perceived or real. Coupled with the lack of clear, consistent antismoking messages from any source, "no message" from the family was considered tantamount to permission to smoke, and those teens were left vulnerable to the influences of pro-smoking messages around them.

Participants often denied, during discussions, that mass media messages about cigarette smoking affected their personal smoking behaviors or brand choices. As reported elsewhere,[41] their knowledge of brand advertising campaigns, their brand choices that mirrored the messages targeted to different gender and ethnic groups, and their interest in brand merchandise belied this assertion. The messages about tobacco use communicated by actors and other cultural role models who smoke were extremely influential.

Successful interdiction of tobacco use within the family unit as a method for reducing teen tobacco use may be an efficacious intervention, given the importance of the family in teens' use, but will be a resource intensive avenue to pursue. Discussion of implications for cessation programs, especially focused on the family, will be addressed in more depth in a subsequent article. Based on findings from the overall study, skills to manage stress, resolve conflict, and resist peer influences appear to be important components for inclusion in a tobacco use prevention or cessation program.[36] Building self-esteem and substituting more desirable mechanisms for coping with the stresses of the teenage years may prove to be a most promising intervention, using activities that are appropriate within the social norms of each sociodemographic group. Clearly, adolescent smokers need cessation programs that are school based (to promote access), that encourage family and community involvement (to moderate authority figure stigma), and that provide nicotine replacement therapy where addiction is present. Prevention needs to begin early and continue without ceasing, and should include family involvement and the goal of changing social norms.

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