# Influences on Adolescent Girls' Decisions Not to Smoke Cigarettes: A Qualitative Study

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## Abstract

While many studies exist on adolescent smoking, few studies have been conducted to examine what influences adolescent girls say impact their decision-making about smoking cigarettes. We purposively sampled 13 teenage girls from a rural, tobacco-producing region in Southwestern Virginia for this qualitative study. All participants reported they were current non-smokers, and they mentioned parents, peers, and the media as the most common and powerful influences on their decision-making. Girls reported receiving strong, clear messages from multiple sources about not smoking, health risks, and morality-based warnings about harm to the body. Also influential to them were grandparents, other family members, churches/spirituality, and their own sense of self. While the results of this study cannot be generalized to the larger population, they do indicate that multiple people and entities have an important role in helping some girls decide not to smoke, even when the tobacco-producing industry has been present in their community for generations.

Keywords: smoking, females, adolescents, decision-making

#### Introduction

It is widely agreed that smoking is a serious health concern in the U.S. The majority (80%) of adults who smoke began smoking as teenagers, and a startling number of those teens continue to smoke well into adulthood (Department of Health and Human Services, 1994). The prevalence rate of females who begin smoking as teens has increased to the point where it has equaled that of boys (Girls Incorporated, 1997). While national surveys on adolescent behavior and health in the U.S. conducted in the last few years indicate a promising decrease in prevalence rates for both male and female adolescents, it is too early to speculate whether this trend will continue long term.

Recent surveys indicate that girls in the U.S. are using some substances, such as cigarettes, at a rate equal to boys and that boys and girls report different reasons for smoking. Females are also at risk for smoking-related diseases, reproductive disorders, pregnancy related problems, higher rates of osteoporosis, earlier menopause, and fertility problems due to smoking (Berman & Gritz, 1991). These differences in smoking behaviors and outcomes among females are evidence of the mounting need to study females in their own right in order to develop effective ways to prevent and treat this form of substance abuse [National Center on Addiction and Substance Abuse (NCASA), 2003].

Besides many of the health problems young women risk as a consequence of smoking, research exists on the risk and protective factors such as personality, family, peers, community, and culture that impact adolescent decision making and behaviors (NCASA, 2003). A recent report by the National Center on Addictions and Substance Abuse (NCASA) (2005) indicates that "Family, friends, and the community have much to do with whether a child decides to use or experiment with substances" (p. 13). All of these can be important influences on girls' decision whether to smoke or not and can either protect girls or put them at greater risk for smoking. Reports from one national survey of adolescent behavior in the U.S. reveals that, regardless of gender or grade, risk factors for smoking included: use of alcohol, marijuana, and other illicit drugs; involvement in violence; having had sexual intercourse, having friends who smoke; and having learning problems (Scal, Ireland, & Borowsky, 2003). On the other hand, higher grade point average and family connectedness were protective factors among all cohorts. In addition, the more protective factors present, the lower the estimated probability of initiating smoking, regardless of whether the teen had high or low risk factors. The authors concluded that prevention efforts that have the best chance of reducing likelihood of smoking initiation among teens are ones that reduce risk factors and enhance protective factors at the individual, family, peer group, and community levels. Others indicate that teens with smoking parents are more likely to engage in smoking, especially when the parents do things such as ask their child to light a cigarette in the parents' mouth (Laniado-Laborin, Woodruff, Candelaria, & Sallis, 2002; NCASA, 2005; Sallis, Deosaransingh, Woodruff, Vargas, Laniado-Laborin, et al., 1994).

While there are risk and protective factors related to the smoking prevalence for all young people, some research has focused on those for teen girls specifically. One study by Unger and Rohrbach (2002) found a number of factors correlated very highly with smoking prevalence such as being female, smoking in the school, perceptions of smoking on TV, and cigarette offers. Other studies suggest the biggest influence on girls' initiation of smoking is for weight control (NCASA, 1996a).

Self-esteem has also been linked to prevalence of teen girls' reports of smoking (NCASA, 2001) in that those who report less confident and more negative views of themselves may be at higher risk for unhealthy, selfdestructive behaviors such as smoking (Gilligan & Brown, 1992; Gilligan, Lyons, & Hanmer, 1990; Gilligan, Ward, & Taylor, 1988). In another self-esteem-related study, girls were more concerned than boys with aesthetics such as bad breath and discolored teeth as a reason not to smoke or quit smoking (Taylor, Ayars, Gladney, Peters, Roy, et al., 1999). Some studies point to stress relief, being around others who smoke, curiosity, considering it fun, and depression as reasons why adolescent girls say they smoke (NCASA, 2001; Commonwealth Fund, 1997). Still others have found that girls say they smoke because they want to feel more mature, appear autonomous, and fit in with friends (French & Perry, 1996; Seguire & Chalmers, 2000). Swan, Creeser, and Murray (1990) found that girls who were active in sports or individual leisure activities were less likely to begin smoking. Others indicate that educational aspirations and plans to go to college are strong negative correlates of smoking (Johnston, 2001). Clearly there are a number of important protective factors that can influence girls' decisions about smoking.

Recently, researchers have begun to point to families and parents as potentially the most important factor of whether or not girls decide to smoke (Brook, Brook, Gordon, Whiteman, & Cohen, 1990; NCASA, 2003; Johnson & Johnson, 2000). The National Center on Addiction and Substance Abuse (NCASA) (2003) researchers found that the majority of girls surveyed in the U.S. who talked about substance use with their parents said the conversations made them feel less likely to use, and taught them things about smoking and drugs that they did not know. Religion was also found to be an important protective factor for girls and substance use. Finally, the researchers found that girls who participated in three or more extra-curricular activities were half as likely to report smoking as compared to those who did not participate in any activities (12.4% vs. 25.5 % respectively). The researchers recommend that parents be alert to early warning signs of substance use including depression, anxiety, and excessive concern about weight and appearance. They also recommend parents set a good example by not smoking, conveying firm and consistent messages against smoking, monitor their daughters' activities, and engage in their lives with them.

Another study by Rotheram-Borus and colleagues (1996) found that parents and other family members were perceived by girls as more influential in their identity development than were the media, church, or teachers. According to a report by Phillips (1998), parents and other family members need to provide certain things for the healthy development of adolescent girls. Those include positive role modeling, identity acceptance, involvement in school; encouragement, advocacy, and support for girls' involvement in extra-curricular activities that help them develop self-esteem and leadership skills. Seguire and Chalmers (2000) conducted a qualitative study and found that parental and sibling modeling of smoking made smoking normal and almost expected for girls, and allowed for easier access to cigarettes. These factors may increase the risk that girls will choose to smoke.

While there has been recent interest in studying adolescent girls and smoking, the focus has typically been on the risks that lead to smoking. Girls in regions of the U.S. that have historically been tobacco producing areas may be at risk for learning that the use of tobacco is not prohibited, even encouraged. What is largely missing from the published literature is an account of what adolescent girls from historically tobacco-growing areas of the U.S., such as Southwestern Virginia, say influence their decisions about whether or not to smoke.

Southwestern, Virginia's economy has been supported by tobacco as a cash crop for nearly four centuries (Borio, 2001), though production has steadily declined in the last 20 years. With the decreasing demand for tobacco in recent years, farmers and communities in this region are adjusting by finding other crops to farm or developing strategies in other industries to remain viable. This part of Virginia is a mountainous region closely associated with Appalachia and the Baptist and other Christian religions are well-represented here (Grymes, 1998). The area is mostly rural with towns spread out across the region. The largest city in this region is Briston, Virginia, with an estimated population of just over 17,000 people (U.S. Bureau of the Census, 2000).

Today, Virginia is ranked fifth in the world for tobacco production, and 21% of Virginia's high school students report that they smoke, similar to the U.S. national average (Campaign for Tobacco Free Kids, 2007).

Social learning theory guided our study. This theory states that people can learn to behave by observing others (Ormrod, 1999). The outcomes of the behaviors people see in others helps reinforce their modeling of what they see others do. Behaviors that are reinforced by others and society are more likely to be modeled. Much of the previously published research suggests that the social context in which girls grow up becomes the model for much of their learned behavior such as smoking. This current study examined how girls who are living in areas where tobacco farming is a tradition make decisions about whether or not to smoke cigarettes. The main research questions for this study include: a) Who or what are the major influences on girls' smoking decision making? b) What messages do girls receive regarding smoking? c) What conversations do girls have with their parents regarding smoking?

## Methods

In this qualitative study, we used in-depth telephone interviews to gather data about smoking decision-making from a sample of teenage girls in grades 7-12 living in one of four contiguous, rural regions of Southwestern Virginia, a historically tobacco-producing area of the U.S. We chose phone interviews as the appropriate method because it allowed for more participants to be interviewed in a shorter period of time, and removed the need for travel by either the interviewers or the participants and their parents. Prior to recruitment, we gained approval from our university's internal review board to conduct the study. In order to gain consent from participants, we began by sending a letter to each girl and her parents providing information about the study and to provide full disclosure about confidentiality and the purpose and use of the data collection. We informed them that their daughters could refuse to participate or end their participation at any point with no consequences. Two weeks after we sent the letter, we contacted the parents of the girls by phone, reviewed the consent form, and asked for their verbal consent to allow their daughters to be interviewed. After a parent gave their consent for their daughter to participate they either put their daughter on the phone or told the interviewer when would be a good time to call back to speak to their daughter. Once we contacted the daughter, we asked her for assent to participate.

We purposively sampled participants from a group of over 100 girls who participated in a previous and related study of ours the year before (see Meszaros et al., 2005). We anticipated interviewing between 10 and 15 girls for the current study, a number that is often adequate for exploratory qualitative studies of this type. To account for refusals, we selected 22 females from the original study based on the high quality of their data. We determined the quality of their prior interview responses by reading their previous interviews and selecting girls who gave thoughtful responses as opposed to one- or two-word answers to most questions. The rationale for this selection process is that we wanted to interview females who had engaged sufficiently in a simple survey so that they would be likely to articulate themselves in a phone interview about their own smoking decision-making.

We sent an introductory letter to each of the girls, requesting their participation in our research along with the approval of their parent or guardian. To encourage participation, we offered a raffle at the end of the study where all participants' names would be entered to win a \$100 gift certificate to a local department store. We contacted each girl by phone two-to-four weeks after the letters were sent to set up telephone interviews. Interviews were conducted between July, 2003 and April, 2004.

At the scheduled day and time, one of two trained interviewers called the participant on the phone to conduct the interview. Interviews lasted between 20 minutes and an hour and fifteen minutes, depending on how talkative was the participant. Participants gave verbal consent to participate and to be audiotaped, having the confidentiality of their interviews assured. We used a semi-structured interview in that each interviewer had a list of questions but were trained to probe and inquire about related topics in order to get a fuller understanding of the experiences of each participant. We have included a list of the basic interview questions in Appendix A. After each interview, trained research assistants transcribed each tape for analysis. We provided a list of guidelines to each transcriber to ensure transcripts were of similar quality and format. Transcribers deleted names and other identifiers from the transcripts. We imported the transcripts into the qualitative analysis software package Atlas.ti (Scientific Software Development, 2002) to manage the data during analysis. We used open and axial coding (Strauss & Corbin, 1998) to uncover key themes across all interviews. Two researchers cross-coded all interviews to maximize the consistency and accuracy of coding themes. Both coders kept journals of their theories, biases, and assumptions of the data as analysis progressed, discussing their journal entries periodically. We met weekly to discuss developing hypotheses and check each other's codes until we came to agreement about the core set of codes for all interviews. Once the coding was complete, we used Atlas.ti to produce reports containing quotes from the interviewees based on key themes.

# Results

Of the 22 girls we contacted, four declined to participate, five were not able to be contacted after numerous attempts, and 13 were ultimately interviewed. All were U.S. citizens, never married, had no children, and reported that they were "very likely to continue their education after high school." Ten were Caucasian, one was Black, and two did not report their race/ethnicity. All reported living with at least one parent, all had parents who were born in the U.S. and nine reported their parents were currently married. Three fathers had bachelor's degrees, and another three had a high school diploma or GED. Two of the mothers had bachelor's degrees, while five mothers had a high school diploma or equivalent. Our analysis of their demographic information determined that sample of participants were not significantly different from the larger sample of girls on all demographic variables.

Unexpectedly, all of the 13 girls interviewed for this study reported that they were currently non-smokers. Most had chosen to never smoke in their life while three had tried smoking or had smoked earlier in their life, but now considered themselves non-smokers. Most of the girls knew someone who smoked, though only four said they had someone close to them (a parent, aunt/uncle, grandparent, sibling, friend) who was a smoker. Only one girl said she had never had an encounter with someone who tried to influence her to smoke, and never felt tempted to try. Overall, the girls interviewed had negative attitudes about smoking cigarettes and felt strongly that it was a bad habit and one that they would not engage in. Considering that all participants lived in a part of the U.S. where tobacco growing has historically been common, the fact that all were currently non-smoking and all had negative attitudes toward smoking is somewhat surprising.

As expected based on social learning theory, the adolescent girls we interviewed reported a number of

influences that they thought had impacted their decision making about not smoking. Not one person or thing influenced girls exclusively, instead many factors from multiple areas of their lives helped influence their decision-making. The themes that emerged from the data were of the influences parents, peers, the media, church or religion, or their own convictions had on their smoking decision-making. The following sections provide details about the reported messages girls received from each of these influences.

#### Parents

In response to an open-ended question about people who have influenced their decision-making about smoking, the most common influence mentioned by participants we interviewed was one or both parents. While mothers were mentioned more than fathers or both parents, it is clear that parental influence was important to these young women in their choices not to smoke cigarettes. All of the interviewees revealed that both of their parents were important influences in their decision making, even if their parents were divorced (all participants had contact with both parents regardless of their parents' relationship status).

Participants reported a variety of ways in which their parents influenced their decision not to smoke; most common was a strong and consistent message that smoking was bad. This message was reported most frequently. Not only did parents tell their daughters that smoking was bad, but they found other ways to reinforce this message. This included messages about the harm smoking does to a person's health, the short and long term health effects, and the effects to the health of others gave a strong message about not smoking. This was always combined with a similar message from the other parent about the negative aspects of smoking. One nonsmoking young woman had a smoking father (though not in the house) and a mother who did not smoke. When asked about the message she got from her mother, it was clear that her mother disliked smoking and told her daughter not to smoke. The verbal message she got from her father was the same. She said:

...he had always told me that it was bad to do and that you get addicted and it's hard to stop and that I should never start. But he also knew how I felt about it too. He always told me he was proud of me for being the way I was.

For this young woman, having one smoking parent who still provided a consistent "don't smoke" verbal message had an influence on her decision not to smoke. On the other hand, one of the young women with whom we spoke said she smoked when she was a younger teen, influenced by the fact that both of her parents smoked at that time. Her parents continued to smoke while at the same time giving her the message that she should not smoke, and she eventually decided to quit and never smoke again. One reason she gave for this decision was that she saw how much smoking negatively impacts the daily lives of her parents, and she decided she did not want that for her own life. around smokers. One young woman put it simply when she said, "And my mom always tells me that it's bad for you. That it's bad for your health and she talks to me about those kinds of things." Along with the message that smoking is bad, a related message came through clearly from parents for nearly all the girls in our study. That message was simply, "don't smoke." A few participants said they feared the repercussions of smoking after their parents repeatedly warned them not to smoke, but most said it was not fear acting on their decision so much as having a clear and unwavering message that they heeded. This message of "don't smoke" was often coupled with additional messages about the health problems and unpleasant side effects of smoking. This message was one that girls clearly remembered getting from their parents from a very young age, and they felt it had a strong positive influence on their decision-making. The messages tend to be coupled, tend to come from reliable and trustworthy sources that are constants in their life, and tend to have been the same recurring messages sent over a long period of time.

Based on reports from the participants, it appears that parents reinforced their verbal messages with one very important non-verbal message. A majority of the girls we spoke to identified the most important non-verbal message from their parents as the absence of smoking in the home. More than any other non-verbal, girls recognized the strong influence of not being raised around smoking as a deterrent from smoking themselves. Other girls we spoke to had at least one parent who currently or previously smoked but who

Some girls described observing the way their smoking parent (most often their father) dealt with his or her own nicotine addiction. A few girls remarked that watching their parents cope with not being able to quit, the rising price of cigarettes, and having to find restaurants or spaces that allowed smoking after many smoking bans were enacted was too much of a hassle to consider smoking themselves. These factors had a strong influence on these girls. One girl whose parents were divorced went to visit her smoking father frequently and said she was highly offended by the smell of him and his house, a situation that confirmed her decision that she would never smoke. Other parents who used to smoke but quit would relay stories about their own smoking and quitting histories to their daughter. Some girls said this information helped them decide not to smoke either because the stories demystified smoking or because the stories of addiction were a deterrent.

Perhaps equally as important as the messages parents gave to their daughter about smoking and the influence girls said their parents had on them, a number of girls said they did not recall any messages from their parents about smoking, nor any conversations specifically on the topic. For example, when asked about how her parents influenced her decision-making about smoking, one girl said, "...we really don't have that kind of discussion because I don't feel pressured or anything so I don't do it or whatever." When pressed by the interviewer to try to identify a recent conversation she had with a parent about smoking, she reconfirmed her assertion that she did not have specific tobacco-related conversations with them when she said, "Well they tell me right or wrong for everything, make your own decisions, be your own person." Similarly, another participant said of her parents, "...they've never had a discussion with me about anything like that. Like about drinking or smoking or drugs. We've never talked about it." It appears that participants did not need overt messages not to smoke, nor did their parents have to sit them down and talk to them about smoking, but simply being an influence on them to make healthy choices was enough to influence their smoking decision-making.

#### Peers

While not the most commonly cited influence on a girl's decision not to smoke, some girls said friends or other people their age had some influence on their decisionmaking. In some cases it was a smoking friend or sibling who influenced the girl not to smoke because of how unattractive she thought it was. When a peer was cited as an influence it was as a positive influence not to smoke. Some girls said that none of their friends smoked and, because of that, they had never felt tempted to smoke. They pointed out that it is not difficult to decide not to smoke when you have never been offered a cigarette by a peer. One girl, when asked about the most recent time she decided whether to smoke, said:

## ...no one's ever even asked me... and none of my friends smoke. I just don't hang out with kids that do... I'm sure there's people that I'm in classes with that do, but I'm not that close with them or anything.

Other girls described a similar scenario where they have never smoked and never intend to smoke, partly because no one they spend significant time with smokes. Some girls went one step further to say that they thought their friends had no interest in smoking nor will they ever smoke. This appeared to serve as a protective function for the girls with whom we spoke. Many of them said they have never had an opportunity to smoke and had no desire to smoke, so they did not perceive themselves as ever having had to make that decision. There were a number of girls who never smoked and had no intention of smoking but who were around peers who smoke quite often. One participant said, "Actually, to be quite honest, I've never been offered one...I've never had one, you know, put in front of my face, and someone's asked me, do you want to? That's a good thing (laughs)." Clearly this is a significant protective factor in that never having a clear and present opportunity to smoke makes the decision not to smoke simpler.

Sometimes peers were influential by being part of an environment where girls could talk openly about smoking. This usually took the form of talking negatively about smoking, discussing the reasons why they did not like smoking, and disliking some people who smoke. These participants had a strong sense of solidarity with the people around them who did not smoke, and some said that the people they know who smoke are not that strong an influence on their decision making. In most cases those peers served as further evidence to them that they did not want to smoke.

There were a few girls with whom we spoke who had smoked at some point in their young lives, and had subsequently decided to quit or not smoke again. Only one reported she had quit after becoming addicted to cigarettes. Those same girls reported encountering other smoking peers who offered them cigarettes, but they reported it was easy for them to say they were not smokers and to refuse the offers. They all said they never felt pressured to smoke, only that they had gotten offers to smoke. One young woman said during her quitting period she would have brief thoughts that a cigarette would have a beneficial, calming effect on her, but that thought dissipated within three seconds when she became aware of her resolve to quit. She said the chance of getting readdicted kept her making the decision not to smoke again. Therefore, starting to smoke, becoming dependent on nicotine, going through the process of quitting smoking, and reminding herself of how difficult quitting was is one process that worked for one participant who currently reports that she is a non-smoker. Becoming addicted to cigarettes and then quitting, therefore, may be one influential process that helps teen girls decide whether or not to smoke again.

#### Media

Besides parents and peers, the media was cited often as an important influence against smoking. While this is contrary to much of what is assumed in popular culture today, a recent wave of anti-smoking advertisements and campaigns appear to have had a positive impact on the girls we interviewed. Girls we spoke to said they had been influenced by some of the advertising campaigns on television against smoking and against tobacco companies. They were often able to provide details about the ads and were able to articulate the reasons why the ads influenced them. Participants were often able to quote from these campaigns or describe exactly what was happening in the ad and what they thought and felt about the messages. Some were able to specifically name the campaign from which some of these ads came. For example, one girl told us that some of the influences on her decision not to smoke have changed over time to include new influences such as the recent "Truth Campaign" in Virginia. Other girls were more vague about what they recall seeing on TV, but the take-away message seemed to be similar and have a lasting impact. Many of the messages they said they got from the TV ads were similar to those they had described getting from others, such as the health risks, risk of death, that smoking is stupid, and that it was not cool. But the way in which the message was delivered was dramatic to the participants who mentioned it.

Another form of advertising that was mentioned a couple times as an influence on participants' decision not to smoke were the warning labels on packages of cigarettes. One said that it was the only non-verbal message she recalls getting about not smoking and added, "...the cigarette package tells you, it warns you...that's what I heard basically." Other girls concurred and said that the advertising and public service messages about smoking had had an impact on their early decisions not to smoke.

## Self

While only a few girls mentioned themselves as an important influence on their decision-making not to smoke, it occurred enough to warrant inclusion in our results. A few girls stated that their own values and morals influenced them, and that they had a sense that one of the biggest influences on their decision-making was themselves. They described this self-directed influence as part of an internal process that told them what was right and wrong, and that not wanting to do something was a strong influence against doing it. One young woman described how her own conviction allowed her to rationalize her decision not to smoke when she said:

...because I don't see any use in it if [cigarettes are] going to give you cancer then...I want to live a long life. I want to see my kids' grandkids and stuff like that. So I'm not trying to die fast by smoking cigarettes.

Clearly some of her self-direction came from the influence of media and others in that she understood the health consequences of smoking, but she had absorbed those anti-smoking messages so completely that they became part of her internal, guiding voice.

Another girl we spoke to described how she has influenced herself about smoking. She told us, "...I don't know what stops me. I guess because I don't have time to go out and do it, and I don't feel the desire to go out and do something like that." Knowing she was now legally able to buy cigarettes, she said she had tried them a few times and liked them. Reaching the legal age to smoke had an influence on her decision to try to smoke, but this was combined with a stronger internal and external message not to. She added that her brother smokes and she thinks her brother is ignorant for smoking and did not want to do what he does. It is clear from her account that her process of deciding not to smoke has been influenced by a number of factors including her age, legal restrictions in the U.S., observing a smoker who she is close to, and internalized messages.

## **Religion/Spirituality**

Some of the girls we spoke to described their religion or spirituality as an influence of on their decision making about smoking. The ways in which church influenced girls was similar, as well. We did not specifically ask the girls what religion they were or what church they attended, but a few volunteered this information. One was a member of the Church of Jesus Christ of Latter Day Saints, another grew up in a Pentecostal Holiness church, and others simply described themselves as Christian. Those who talked about religion or church as an influence said they had gotten strong messages that smoking was not good, that it was against the Bible's teachings, or that they never saw other church members smoking. The messages they got were both moral and ones about health and wellness. From a moral standpoint, one participant said that her religion taught her:

...it's about being impure, and about doing things intentionally to destroy yourself, and that's just not something that, you know, being a Christian is about. You know, you just don't go out and intentionally destroy yourself like that. It's just like committing suicide but slowly. And suicide is a sin, so, I mean, you are just going to take something away that you've been given and it's not your right to do that.

Another young woman echoed this sentiment when she said, "I guess the main thing would probably be the religious aspect that it would be disappointing to my God as well as disrespectful to him that I was using my life in a worthless way." Other messages from church were more about health. They were focused on the ways in which smoking can harm a person and how it is not good for the body.

Besides getting a strong message from church or religion, some girls said religion indirectly influenced them through the strong messages they received from other family members who were religious. It was not uncommon for girls to say that they had parents or grandparents who were very religious and taught their beliefs about smoking within the context of their religious beliefs. As an example, one young woman talked about the way in which her parents influenced her by way of their religious beliefs. She said, "And we have a very Christian-faithed family so it's really against our beliefs to do that [smoke]. And so my parents probably have impacted me a little--a lot--especially my father."

## **Other Influences**

In addition to the influences of parents, peers, media, self, and religion on smoking decision-making, some participants said there were other influences that impacted them. Other people were sometimes mentioned as having had a significant impact on their decisions about smoking. One girl remarked that she had an adult woman who was her babysitter when she was a child. She described this woman as "a good Christian woman" who taught her that smoking was wrong. She said she had been strongly influenced by her babysitter's faith and spirituality which led her to listen to her advice.

While parents were often cited as major influences on smoking decision making, so too were other family members. Almost universally when another family member was mentioned as an influence, it was in a positive way. Grandparents, aunts, uncles or cousins who smoked were cited as reasons girls chose not to smoke. A number of girls said visiting family who smoked made them not want to smoke due to the smell on their clothing when they left or noticing the stains on their walls and curtains in their homes. One girl said, "Well my dad when I was little he did smoke and I remember how awful it smelled and how it...when my grandmother was smoking how she would just cough on purpose..., that's gross." Clearly, some people had a positive influence on girls like this one even though their smoking behaviors demonstrated unhealthy choices. In addition, some girls said their feelings toward their smoking extended family members were reinforced by the verbal messages they got from their parents. Some girls reported having conversations with their parents about how "nasty" it was that other family members smoked. It was not uncommon for girls to report that most of the conversations they had with one or both parents surrounded the washing of odorous clothes after a visit to a smoking family member's home. Some girls report that this was a strong disincentive to smoke, and this was reinforced by the messages they got from their parents about smoking being a negative behavior.

## Discussion

All the girls in this study reported that they were current non-smokers, a finding we had not anticipated. We believe that it is possible that girls who were current smokers may have opted not to participate either because of feelings of guilt or fear that an adult might find out. While another thought might be that the girls interviewed were not telling the truth about their smoking behavior, it is unlikely in an in-depth, semi-structured telephone interview where the only incentive was a chance at a gift certificate. Interviewers could have detected dishonest responses through the course of the interview since they were thorough and examined issues from many angles. This study, therefore, does not represent the thoughts and feelings of current smokers, nor those that would be considered high risk of future smoking since they were well above the age where smoking behaviors nearly always begin. We had assumed that growing up in a historically tobacco-growing region of the U.S. would have some negative influence on the participants' smoking decision, though we did not find this to be true. While we never specifically asked whether growing up in that area of Virginia impacted their decision not to smoke, neither did any of them mention it during the interview. It appears as though the agricultural status and history of that region has not had a direct negative impact on the smoking decision-making of the participants with whom we spoke.

Most of the participants had parents and friends who were non-smokers, all had aspirations to enter higher education, and the majority had parents with a level of education at or above a high school diploma. This study, therefore, provides some insight into how a small group of low-risk teen girls in Southwestern Virginia make the decision whether or not to smoke, regardless of whether they have ever tried smoking.

The non-smoking girls we spoke with acknowledged a number of influences on their current decision not to smoke cigarettes, a finding we anticipated based on social learning theory. The strongest of these influences appears to be parents. As some previously published articles indicated, parents were strong influences on these girls, giving them a range of strong, decisive verbal messages about not smoking. Even those whose parents smoked reported that they got strong verbal messages from their parents not to smoke. The most common messages from parents were about negative health consequences and an overall message that smoking is bad. Some girls reported that their parents did not send strong verbal messages but sent strong non-verbal messages by ensuring their daughter was not exposed to smoking in the home. Most of the girls we spoke to said this was an important influence on their decision not to smoke. On the other hand, some research has suggested that parents of older teens think they have little influence over their child's decision whether or not to use drugs such as nicotine (NCASA, 1996b). Our study suggests parents should not diminish their influence and should persist in providing the message to their children that smoking is bad for them.

Besides parents, other family members had important influences on the girls to whom we spoke. Grandparents, aunts and uncles, cousins and siblings were all mentioned as other influences. Sometimes their influence was felt by the smoking behaviors they engaged in that girls decided were negative, and therefore helped influence them not to engage in similar smoking behaviors. Others were positive influences in that they gave strong not-smoking messages that served to confirm what girls had heard from their parents since early childhood. These additional family members appear to have an important influence on the decision-making process that girls report having around not-smoking.

Experts and research suggests that some girls are at lower risk of drug abuse, such as addiction to cigarettes and other drugs, than others (NCASA, 1996a). "Optimism about one's personal future, an active religious life, quality of academic performance, extent of parental involvement in the teen's life, and awareness one will be forced to choose whether or not to use drugs" are all protective factors identified in one 1995 nation-wide U.S. survey (NCASA, 1996a; p. 25). The same survey conducted a year later revealed that some of the other protective factors included having no friends who smoked cigarettes and having parents who believed they had a strong influence on their child's decision making (NCASA, 1996a). As reported earlier, most of the girls interviewed said their parents indeed were a strong influence on their decisions. All of the girls interviewed for this study also said they were very likely to continue their education past high school. Many of these girls also reported not having immediate family members or friends who were smokers. While these are two protective factors found in this study, they are not the only factor protecting these girls from smoking. Our findings confirms what others have found; not one factor is solely responsible for girls' decisions about whether or not to smoke, but a large and often diverse set of factors lead their decisions. Our results support the conclusion of Scal and colleagues (2003) that the best prevention efforts will be ones that reduce risk factors and enhance protective factors at the

individual, family, peer group, and community levels. This fits with the social learning theory perspective which states that people learn based on what they see others do and the outcomes of those behaviors.

While the literature suggests peers are a strong influence on adolescents' decision to smoke, and studies estimate that nearly 80% of teens report they have friends who smoke (NCASA, 1996b), our study did not find that peers were as strong an influence on our sample of nonsmoking adolescent girls. They were rarely mentioned first as an influence. Girls we spoke to usually described their peer influences as positive ones. This is not surprising considering our participants were all nonsmokers who reportedly felt little pressure from their friends and peers. Social learning theory supports this finding in that girls learn through observing the behaviors of others and receive positive reinforcement for demonstrating that learned behavior. None of the girls reported pressure to smoke from their peers. It is possible that girls who end up smoking receive more pressure from peers that help influence them to smoke. Past research has found that when girls have friends who smoke, the influence is often that they believe smoking is normative, therefore are more likely to smoke (Unger & Rohrbach, 2002). The few girls in this current study who had good friends who smoked, however, said their friends never pressed them to do the same, and they reported that they could resist any temptation they might feel to smoke simply because friends did. This is evidence of the strong conviction of a lot of these girls and their sense of self as well as the strong influence of other anti-smoking people and messages that have been internalized.

Media was also mentioned in the current study as an influence girls' smoking decision-making. on Specifically, girls cited a number of anti-smoking advertising campaigns they had seen that they were able to quote verbatim that they said helped them decide not to smoke. While results tend to be mixed on exactly why and how these campaigns impact adolescent decisionmaking, most current studies show that they do sway teens in the direction of deciding not to smoke (Thrasher, Niederdeppe, Jackson, & Farrelly, 2006; Weiss, Cen, Schuster, Unger, Johnson., et al., 2006), especially among teens who already are non-smokers (Sutfin, 2006).

This study is an important contribution to the extant literature in that it explores in a qualitative way what girls from a tobacco-producing region of the U.S. say influenced their decision-making not to smoke cigarettes. We believed that living in that area of the country alone would create a scenario where young women would embrace pro-smoking attitudes and some would be likely to smoke. This was not the case, however. All the girls with whom we spoke had a number of things that influenced their decision whether or not to smoke and they felt supported in their decisions from parents, friends, and even recent anti-smoking media campaigns. Because we chose the qualitative methodology, one of the strengths of the study is that we were able to learn about the lived experiences of a small group of girls in their own words. Interviews are a good way to learn about the various ways in which people have experienced a phenomenon like smoking decision-making. We were also able to get clarification on important issues and learn about some things such as the positive influence of media that were not represented in previous literature. One aspect of this study that was both a strength and a limitation is that all of the participants were from a small region of the U.S. While it is significant that this region is a traditionally tobacco-growing region, it will be important to expand this type of qualitative research to include other girls in other regions of the country, including urban settings. Future research might include a longitudinal study of this type that examines perceived smoking-related messages over a longer period of time. An additional piece that could be included in a future study is a comparable sample of girls who self-define as current smokers as well as conducting the study with a comparable group of male teens. It will also be important to study additional samples of teens in other tobaccoproducing parts of the U.S. to see how those results differ or are similar.

The results of this study can inform family life educators, therapists, health care professionals, school officials, and others who have interactions with teens and their families about the complexity of factors that lead girls to make decisions not to smoke. Increasing the influence of some of these factors may help to protect girls and help them make healthier decisions about not smoking.

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## Appendix A

Interview Questions

1. Overall, what people or things do you think have helped you decide whether or not to smoke cigarettes?

- 2. Which of those people or things you just mentioned would you say have had the most impact on your decision-making? What next? What last? Have they changed over time? How can you tell they've had an impact?
- 3. Think about the most recent time you decided whether or not to smoke a cigarette. Tell me about how you made the decision to smoke or not. What did you think about, what did you consider, how long did it take you to decide, what factors led to your decision, who or what influenced you, what were the

risks and benefits you were thinking of around that time?

- 4. Now I'd like to ask you specifically about messages you've gotten about smoking or not smoking from your parents. What messages have you gotten from your mother about smoking? What about your father? What verbal messages and non-verbal messages?
- 5. Think about the most recent time you and one of your parents discussed smoking. Where were you, who initiated the conversation, how did it go, and how did you feel about it when it was over?