Novelty-Seeking Teens May Be More Easily Influenced by Tobacco Advertisements

Teens with higher levels of a personality trait known as novelty-seeking have been shown to be more receptive to tobacco industry promotional campaigns than teens with low levels of the trait. Novelty-seeking is a heritable trait characterized by a tendency toward excitement in response to new experiences; engagement in sensation-seeking, impulsive, and risk-taking behavior; and sensitivity to reward. Scientific data indicate that teens' receptivity to tobacco marketing campaigns may play an important role in the choice to start smoking. Building on this research, scientists at the University of Pennsylvania and Georgetown University found that teens with high levels of the novelty-seeking trait may be more than twice as likely as those low in the trait to be moderately to highly receptive to tobacco promotional campaigns.

The research team, led by Dr. Janet Audrain-McGovern, collected survey data from 1,071 9th-graders at 5 Northern Virginia high schools. Surveys included questions about smoking habits, peer and family smoking exposure, novelty-seeking personality traits, and demographics. Researchers used a standardized scale to measure the teens' receptivity to tobacco advertising and marketing campaigns.

Overall, 33 percent of the teens reported high levels of receptivity to the advertising campaigns and 20 percent reported minimal levels of receptivity. Almost one-half of the highly receptive teens also scored high for novelty-seeking compared with one-quarter of the teens who were minimally receptive to tobacco advertising.

Of the teens who had never smoked, 37 percent of those highly receptive to tobacco promotions scored high for novelty-seeking compared with 19 percent of the teens who were minimally receptive. However, this relationship was not significant among teens who had ever smoked.

In a separate study, Drs. Kenneth Tercyak and Janet Audrain-McGovern administered standardized questionnaires to 1,136 10th-graders enrolled in Mid-Atlantic high schools to evaluate their tendencies for novelty-seeking, symptoms of attention deficit hyperactivity disorder (ADHD), lifetime cigarette smoking, and age of first cigarette. They found that teens with high degrees of symptoms for ADHD who had smoked cigarettes during their lifetimes also rated highest for novelty-seeking compared with other teens. The researchers say that teens with ADHD and novelty-seeking traits may be at a higher risk for smoking cigarettes than teens without these traits. This is likely because novelty-seeking and ADHD symptoms have common, basic behavioral elements such as poor self-control, attention dysfunction, and risktaking behavior, which may contribute to tobacco use.

WHAT IT MEANS: Novelty-seeking teens may be more vulnerable to cigarette smoking. Therefore, anti-tobacco campaigns that take this trait into consideration may be the most effective in preventing these teens from smoking.

Dr. Audrain-McGovern, Dr. Tercyak, and colleagues published the studies in the October 2003 issue of Health Communication and the December 2003 issue of Substance Use and Misuse. The studies were funded in part by NIDA.