

## Teens' desire for thrills may lead them to smoke

October 24 2017, by Katie Bohn



Credit: AI-generated image (disclaimer)

Teens are notorious risk takers, but it's hard to predict who will be content to stay home on Friday night and who will be smoking under the bleachers. According to Penn State researchers, it may be the teen "sensation seekers" who are more likely to smoke cigarettes.



The researchers examined the association between <u>sensation</u> seeking—the desire for new and intense experiences—and cigarette smoking through adolescence and young adulthood. They found that sensation seeking was more strongly associated with <u>smoking cigarettes</u> during adolescence than at other ages, suggesting that sensation-seeking teens may be more likely to smoke than their peers.

David Lydon-Staley, a postdoctoral researcher at the University of Pennsylvania who worked on the study while a doctoral candidate at Penn State, said the findings could help improve <u>smoking prevention</u> and intervention programs and also pave the way to learn more about why some teens are more likely to smoke than others.

"It could be that being high in sensation seeking was enough to drive these adolescents to smoke," Lydon-Staley said. "But given that we found age differences in the association between sensation seeking and smoking, it's also important and interesting to think about factors like cigarettes being illegal for these adolescents to buy, and if that could be part of the thrill. Looking at that broader psychosocial context is important for understanding these associations."

According to previous research, 18 percent of eighth graders and 40 percent of 12th graders have reported smoking at some point in their lives. Previous research has also shown that risk taking behaviors tend to increase in adolescence, and that many adult smokers started when they were teenagers.

Lydon-Staley said this peak in risk taking can be partially explained by how the brain develops during adolescence.

"The part of the brain that responds to rewards seems to be highly responsive during adolescence, which may lead adolescents to pursue the potential rewards available through smoking," Lydon-Staley said. "At the



same time, the parts of the brain that inhibit impulses are still developing. There's this mismatch in regions of the brain that encourage approach toward rewards, and regions that are involved in inhibiting this impulse."

While this gives insight into why teens in general are drawn to risky behaviors, the researchers said it does not help identify which teens are more likely to experiment with drugs or alcohol. Because not every teen smokes, the researchers wanted to identify individual risk factors that may lead adolescents to try the habit.

For the study, the researchers analyzed a national dataset with data gathered from 5,080 <u>adolescents</u> and young adults over a 13-year period. Each participant reported how often they smoked and rated how much they agreed with the statement, "I like to take risks," which helped measure how motivated they were by sensation seeking.

The researchers found that sensation seeking peaked at age 13.74 before decreasing through adolescence and reaching its lowest point at 30.91 years of age. Additionally, the chance of smoking at any point in the previous month increased sharply from age 12 to age 18.

When they examined the relationship between sensation seeking and smoking, the researchers found that while there was an association at almost every age, the strongest association was between 15 and 16 years old. The association became nonsignificant around the age of 32.

Lydon-Staley said the findings—recently published in the *Journal of Research on Adolescence*—could help pinpoint who is most at risk for experimenting with cigarettes, potentially improving prevention and intervention efforts.

"The next step is drilling down and trying to figure out what it is about



sensation seekers that make them more likely to smoke," Lydon-Staley said. "Is it the way they view the positive and negatives of smoking, or is it their ability to control their behavior when there's something that they really strongly desire? Learning more is a clear next step."

**More information:** David M. Lydon-Staley et al. Age-Varying Associations Between Cigarette Smoking, Sensation Seeking, and Impulse Control Through Adolescence and Young Adulthood, *Journal of Research on Adolescence* (2017). DOI: 10.1111/jora.12335

## Provided by Pennsylvania State University

Citation: Teens' desire for thrills may lead them to smoke (2017, October 24) retrieved 19 April 2024 from <a href="https://medicalxpress.com/news/2017-10-teens-desire-thrills.html">https://medicalxpress.com/news/2017-10-teens-desire-thrills.html</a>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.