

Peer Influences on Vaping in Adolescence

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BACKGROUND

This brief summarizes the findings from Skinner, A.T, Golonka, M., Godwin, J., Kwiatek, S., Sweitzer, M., Hoyle, R.H. *My friends made me do it: Peer influences and different types of vaping in adolescence, Addictive Behaviors, (2024).*

The authors explore the role of peer influences on adolescent vaping behavior and discuss strategies for vaping prevention interventions.

The study used data collected from a pre-registered study of 891 adolescents at age 17. The study examined whether the frequency of vaping nicotine and marijuana was related to resistance to peer influence (RPI) and perceptions of friends' and classmates' vaping.

The study confirmed prior research: teens who were better at resisting peer influence were more likely to avoid vaping, while those who thought more of their friends vaped were both more likely to vape and to vape more often. This study expanded on existing research by examining how teens' perceptions of vaping behavior among their close friends and their classmates relate to their ability to resist peer influence. The findings suggest that lowering vaping rates could depend on helping teens not only resist peer pressure but also making sure they know that fewer peers are vaping than they think.

OVERVIEW

Since 2014, vaping has been the most common form of substance use among U.S. adolescents.¹ The rapid adoption of vaping has brought significant concerns, as adolescent vaping is linked to lower emotional well-being and increased likelihood of future cigarette use.² Surveys have also found that many adolescents mistakenly believe e-cigarettes do not contain nicotine, contributing to unintentional nicotine use.

Vaping cannabis has similarly grown in popularity among adolescents, with use doubling between 2017 and 2020. Nicotine and cannabis harm teen brain development, making it urgent to understand why teens vape.



National data shows that peer influence plays a significant role in vaping initiation, with many teens reporting that their friends vape. Since peer pressure strongly affects substance use, looking at teens' resistance to peer influence (RPI)—their ability to stick to their own choices despite peer pressure—is critical in understanding and preventing vaping behaviors. To better understand how these factors influence teen vaping, this study surveyed North Carolina teens about their perceptions of peer vaping.

Vaping behavior, peer substance use, and RPI were measured using self-reported surveys and a validated 10-item scale for RPI. Other key factors included opportunities to vape, whether parents vape, economic challenges, age, sex, and minority status. The data was analyzed with specialized models to look at how likely teens were to avoid vaping and, for those who vape, how often they vaped.

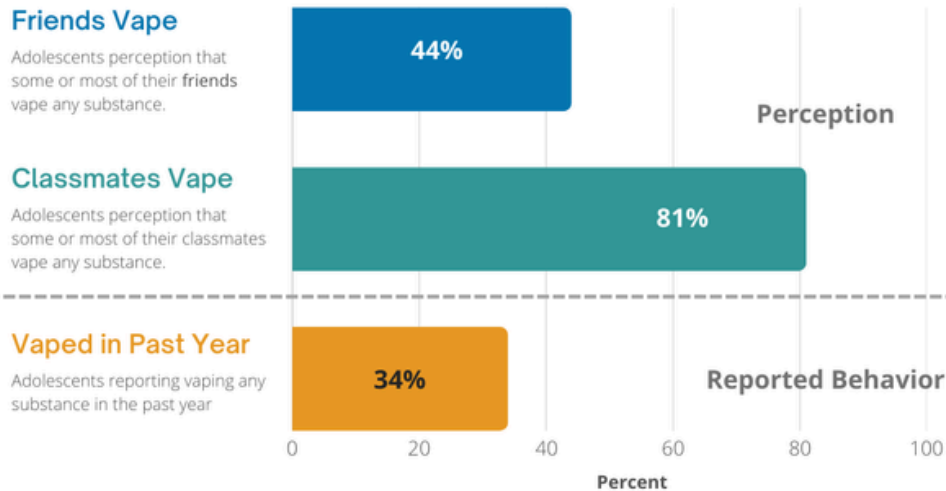
¹ Centers for Disease Control and Prevention. (2024) Youth and Tobacco Use. Retrieved on January 28, 2025 from: <https://www.cdc.gov/tobacco/php/data-statistics/youth-data-tobacco/>

² U.S. Surgeon General. (2024) Know the Risk: E-Cigarettes and Young People. Retrieved on December 12, 2024 from: <https://e-cigarettes.surgeongeneral.gov/>

FINDINGS

Adolescents often overestimate how many of their peers vape, which can influence their decision to vape. In this study, adolescents believed that most of their classmates vape (81%) and that many of their friends vape (44%), despite most adolescents (66%) reporting they do not vape (see Figure 1). National data from the Monitoring the Future study also reflect this trend. Interventions focused on correcting these misperceptions about peer behavior may help reduce vaping.

Figure 1



DEFINITIONS

Vaping: the act of inhaling vapor from an electronic device such as an e-cigarette. The vapor usually contains nicotine, marijuana, and/or flavorings, among other chemicals.

E-cigarettes: battery-powered devices that heat a liquid (containing nicotine or marijuana) to create vapor inhaled by users. They are often used as an alternative to traditional cigarettes.

Resistance to Peer Influence (RPI): an individual's ability to resist being influenced by their peers, especially when it comes to adopting typical behaviors among their social group.

Note: Federal laws prohibit sales of all tobacco and vapor products to anyone under the age of 21 years old. Marijuana use is illegal regardless of age in North Carolina.

Perceptions of friends' vaping habits are stronger predictors of adolescent vaping than perceptions of classmates' habits. Youth who estimate more of their friends vape are more likely to vape themselves. However, youth with more skills for resisting peer influence are less likely to vape.

Furthermore, skills for resisting peer influence are largely effective even when the social environment in which youth make decisions about vaping are hardest – when many or most of their peers are perceived to vape. **Regardless of how many friends are perceived to vape (none or most) RPI skills are equally effective at decreasing the probability of vaping nicotine and marijuana.** When the focus shifts to classmates, peers they don't know as well, the impact of RPI skills on the probability of vaping does vary depending on how many classmates are perceived to vape. Unlike perceptions for friends, RPI skills decrease the probability of nicotine vaping when youth perceived some but not most classmates vape. RPI skills do, however, decrease the probability of marijuana vaping when youth perceive some and most classmates vape.



KEY INSIGHTS

- 1 Perceptions of friends' vaping habits are stronger predictors of adolescent vaping than perceptions of classmates' vaping habits
- 2 High RPI protects against vaping even when teens perceive that some or most of their *friends* vape
- 3 High RPI protects against vaping marijuana even when teens perceive that some or most of their *classmates* vape and against vaping nicotine when some but not most of their *classmates* vape



CONCLUSION

Given that resistance to peer influence (RPI) generally increases between the ages of 14 and 18, there is a critical opportunity to strengthen these skills during adolescence. Since RPI development levels off after age 18, it is essential to intervene during middle and high school. In North Carolina, all schools offer health education, which includes substance abuse prevention. These programs should integrate RPI education into their curriculum, helping students develop the skills to resist peer pressure effectively.

RPI offers a practical way to design vaping prevention interventions that don't require teens to change their friend groups. Along with RPI education, teaching accurate statistics on vaping can help correct teens' common misperception that most of their peers vape, a belief that often leads to more use. It is also important to clarify that e-cigarettes contain nicotine, which many teens do not know. Combining RPI training with factual information on vaping may make programs more effective at preventing adolescent vaping and unintentional nicotine use.