How likely is someone to become addicted to using a JUUL e-cigarette/ smoking cigarettes?

Perceived likelihood of becoming addicted to JUUL e-cigarettes and combustible cigarettes was assessed by the question:

How likely is someone to become addicted to JUUL e-cigarettes and smoking regular cigarettes.

This study assessed adolescents' perceptions of the absolute and relative harmfulness and addictiveness of using a JUUL e-cigarette and smoking regular cigarettes.

Harm perceptions provide a strong empirical basis for explaining why adolescents initiate and continue to use tobacco products. Previous research suggests that youth who perceive vaping as posing little to no risk of harm or addiction will be more open to try using, or continuing to use, e-cigarettes.

In 2018, JUUL became the fastest-growing and highest-selling brand of e-cigarettes/tobacco products in the United States. This study assessed adolescents' perceptions of the absolute and relative harmfulness and addictiveness of using a JUUL e-cigarette and smoking regular cigarettes.

Methods

A non-probabilistic sample of U.S. adolescents aged 13-17 years (n = 9,872) was recruited from an internet research panel to complete an online survey between 23 November and 13 December 2018. Individuals were excluded if they had not seen or heard of JUUL e-cigarettes before this study. Parental consent and youth assent were obtained.

Perceived harm of occasional and daily use of a JUUL e-cigarette and combustible cigarettes was assessed by four questions:

1. "Do you believe using a JUUL e-cigarette is less harmful, about the same, or more harmful than smoking regular cigarettes?"
2. "How much do you think people harm themselves when they use a JUUL e-cigarette?" (1) No harm; (2) A little harm; (3) Some harm; (4) A lot of harm.
3. "How likely is someone to become addicted to using a JUUL e-cigarette?" (1) Very unlikely; (2) Somewhat unlikely; (3) Neither likely nor unlikely; (4) Somewhat likely; (5) Very likely.
4. "How long do you think someone has to use a JUUL e-cigarette/ smoke cigarettes before it harms their health?" (1) 10 years; (2) 5 years; (3) 1 year; (4) 6 months; (5) 6 months.

Data were weighted to be nationally representative of the U.S. adolescent population on age, gender and census region.

Results

Daily Use

Around 4 out of 100 U.S. adolescents (4.0%) think using a JUUL e-cigarette every day would be harmless.

Around 6 out of 100 U.S. adolescents (6.0%) think using a JUUL e-cigarette every day would cause 'a lot of harm'.

Occasional Use

Around 8 out of 100 U.S. adolescents (8.0%) think using a JUUL e-cigarette on some days would be harmless.

Around 20 out of 100 U.S. adolescents (20.0%) think using a JUUL e-cigarette on some days would cause 'a lot of harm'.

Duration of use before experiencing harm

Around 11 in 100 U.S. adolescents either believed they would never experience any harm from using a JUUL e-cigarette or that they would use a JUUL e-cigarette for at least 10 years before they would experience any health harms.

Likelihood of addiction

17.3% of U.S. adolescents believed people are somewhat/very unlikely to become addicted to using a JUUL e-cigarette.

Relative harmfulness and addictiveness

38.3% and 39.3% of adolescents believed using a JUUL e-cigarette is less harmful and less addictive than smoking regular cigarettes, respectively.

Conclusions

The majority of U.S. adolescents believe using a JUUL e-cigarette poses fewer risks to health than smoking regular cigarettes, but also that using a JUUL e-cigarette would put them at some risk for experiencing health problems and addiction.

However, a small but significant proportion of adolescents held the erroneous belief that using a JUUL e-cigarette would be risk-free.

Several theories of health behavior change and previous research on tobacco harm perceptions would predict this smaller group of adolescents is at higher risk for initiating or continuing to use JUUL e-cigarettes.

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