

Research paper

E-cigarette use and willingness to smoke: a sample of adolescent non-smokers

Dr. Thomas A Wills, Prevention and Control Program, University of Hawaii Cancer Center, 701 Ilalo Street, Room 528, Honolulu, HI 96813, USA;

twills@cc.hawaii.edu

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Abstract

Objective There is little evidence on the consequences of using electronic cigarettes (e-cigarette) in adolescence. With a multiethnic sample of non-smokers, we assessed the relation between e-cigarette use and social-cognitive factors that predict smoking of combustible cigarettes.

Methods School-based cross-sectional survey of 2309 high school students (mean age 14.7 years). Participants reported on e-cigarette use and cigarette use; on smoking-related cognitions (smoking expectancies, prototypes of smokers) and peer smoker affiliations; and on willingness to smoke cigarettes. Regression analyses conducted for non-cigarette smokers tested the association between e-cigarette use and willingness to smoke cigarettes, controlling for demographics, parenting, academic and social competence, and personality variables. Structural equation modelling (SEM) analysis tested whether the relation between e-cigarette use and willingness to smoke was mediated through any of the three smoking-related variables.

Results Non-smokers who had used e-cigarettes (18% of the total sample) showed more willingness to smoke cigarettes compared with those who had never used any tobacco product; the adjusted OR was 2.35 (95% CI 1.73 to 3.19). SEM showed that the relation between e-cigarette use and willingness to smoke was partly mediated through more positive expectancies about smoking, but there was also a direct path from e-cigarette use to willingness.

Conclusions Among adolescent non-smokers, e-cigarette use is associated with willingness to smoke, a predictor of future cigarette smoking. The results suggest that use of e-cigarettes by adolescents is not without attitudinal risk for cigarette smoking. These findings have implications for formulation of policy about access to e-cigarettes by adolescents.

<http://tobaccocontrol.bmj.com/content/early/2015/08/10/tobaccocontrol-2015-052349.abstract?paperoc>