

Examining the impact of various types of childhood abuse on e-cigarette expectancies among young adult e-cigarette users

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Author(s):

Esteban G Ortiz, Staff, BA, The Miriam Hospital, Brown University. Dept of Psychiatry & Human Behavior, Center for Behavioral and Preventative Medicine

Milagros Grados, Staff, BA, The Miriam Hospital, Brown University. Dept of Psychiatry & Human Behavior, Center for Behavioral and Preventative Medicine

Evelyn Hernandez Valencia, Graduate Student, BA, The Miriam Hospital, University of Rhode Island. Dept of Psychiatry & Human Behavior, Center for Behavioral and Preventative Medicine

Chrystal Vergara-Lopez, Assistant Professor, PhD, The Miriam Hospital, Brown University. Dept of Psychiatry & Human Behavior, Center for Behavioral and Preventative Medicine

Abstract

Background & Aim:

The prevalence of e-cigarette use is highest among young adults (ages 18–24) relative to both adolescents and older adults. Indeed, the rise of e-cigarette use among young people is negating more than 50 years of downward trends in nicotine consumption among youth. Recently it has been shown that young adults with a history of childhood maltreatment (such as abuse) may be especially at risk for utilizing e-cigarettes, exposing this population to negative health outcomes associated with nicotine consumption, and neurotoxins often found in e-cigarettes. However, no studies have investigated the potential differential effect of various forms of childhood abuse on e-cigarette outcome expectancies that may influence the continued use of e-cigarettes among young adults.

Methods:

We examined the differential impact of exposure to childhood physical, sexual, and emotional abuse on e-cigarette outcome expectancies among young adult e-cigarette users ($n = 67$, mean age = 21.94 [range 18–25], 60% Women, 66% white-non-Hispanic, 69% daily e-cigarette users, 31% weekly e-cigarette users). Participants were recruited via social media and then underwent an eligibility interview to ensure regular e-cigarette use. At a laboratory visit participants completed the Childhood Trauma Questionnaire (Bernstein et al., 1994) which assesses various exposures to abuse and the Adolescent E-Cigarette Consequences Questionnaire (Cristello et al., 2020) which assesses e-cigarette expectancies.

Results:

We employed a path analysis framework and found that physical abuse was uniquely associated with e-cigarette use for negative affective regulation ($\beta = 0.26$, $p = 0.05$), social facilitation ($\beta = 0.35$, $p = 0.005$), and reducing boredom ($\beta = 0.27$, $p = 0.05$). No effects were shown for emotional or sexual abuse after controlling for the effect of physical abuse ($p_s = > 0.05$).

Conclusion:

These preliminary findings add to a new body of literature linking exposure to childhood abuse and adult substance use outcomes. Furthermore, these findings emphasize the importance of distinguishing the impact of varying forms of childhood abuse on predictors of e-cigarette use in young adults.

Clinical Implications:

Although more research in this area is needed, these findings suggest that targeting emotion regulation, social anxiety, and replacement behaviors may be particularly important for e-cigarette cessation programs in this population.