

ASHES, Vol. 14(9) - What's in that vape? Sending health warning messages by text

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In the last couple of years, fewer American teenagers [have smoked](#) cigarettes. However, e-cigarettes and vaping devices have [increased in popularity](#) among teenagers. E-cigarettes and related devices can still have harmful effects on the [bodies](#) and [minds](#) of young people, and might make teenagers [more likely](#) to smoke regular cigarettes. One way to mitigate these potential harms is to distribute warning messages. This week, ASHES reviews a [study by Seth Noar and colleagues](#) that evaluates how teenagers respond to e-cigarette harm warning messages sent by text-message.

What was the research question?

What do teenagers think about e-cigarette harm warning messages delivered via text-message?

What did the researchers do?

The researchers invited teenagers between 14 and 18 to participate in this study. Participants completed an online survey that assessed their willingness to use e-cigarettes and their knowledge of the risks of e-cigarette use. The researchers then texted one of three warning messages to the participants each day for six days.

- One message warned teens of the presence of addictive nicotine in e-cigarettes,
- another discussed the harmful chemicals found in these devices, and
- the last message mentioned the detrimental effects of e-cigarettes on teenagers' brains.

At the end of the study, participants answered a similar online survey as before that also included questions about whether they thought the messages were effective and fear-provoking. The researchers then analyzed the data using [ANOVA](#) and [McNemar tests](#).

What did they find?

Participants thought the messages about harmful chemicals in these devices and detrimental effects on the teenage brain were [significantly](#) more effective and fear-provoking than the nicotine message. After seeing all three warning messages, participants were significantly more likely to understand that e-cigarettes contain harmful chemicals and can negatively impact teenage brain development. However, participants did not increase their knowledge about the role of nicotine in e-cigarettes, likely because most participants already knew this before the study began. There was no change in how willing participants were to use e-cigarettes from the beginning to the end of the study.

Changes in teenagers' knowledge of e-cigarette health risks before and after receiving warning messages

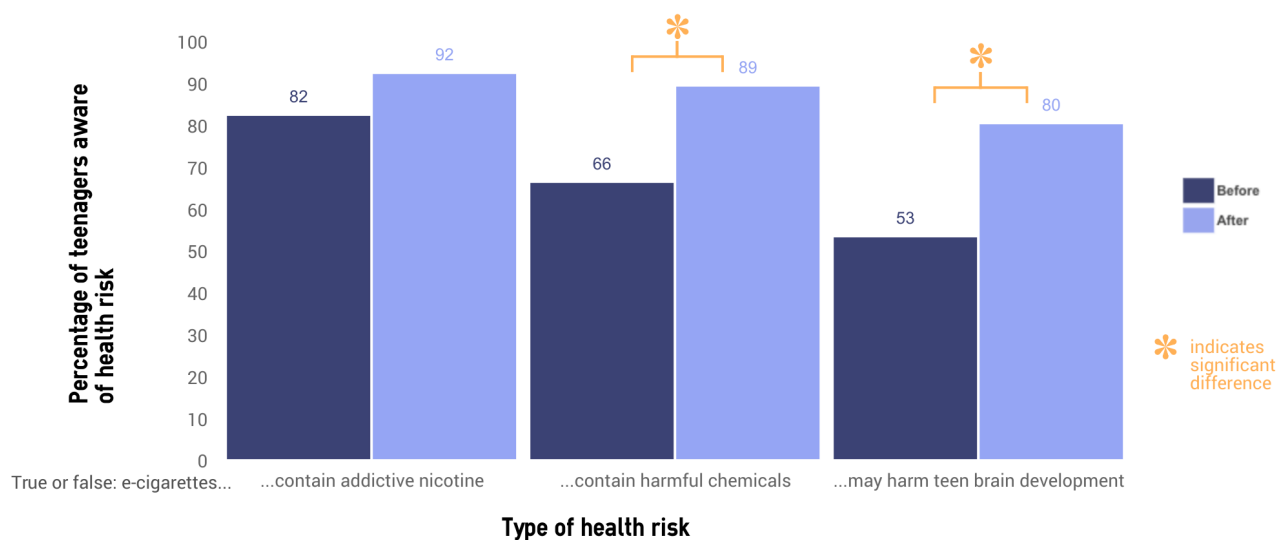


Figure. Bars indicate percentage of participants aware of specific e-cigarette health risks before and after receiving the health harms warning messages. Click image to enlarge.

Why do these findings matter?

[Many people think](#) that e-cigarettes and vapes are safer than smoking regular cigarettes. However, e-cigarettes and vapes are also associated with [health risks](#). It is important for teenagers to know about these risks so that they can make informed decisions for their health. This study suggests that text messages are a feasible way to spread this kind of information to adolescents, although they might not be effective in reducing e-cigarette use.

Every study has limitations. What are the limitations in this study?

This study only lasted eight days. Although participants increased their

knowledge about e-cigarette harms over the course of the study, we do not know if they retained this knowledge over a longer period of time.

For more information:

[Smokefreeteen](#) has resources and available teenagers concerned about their smoking. For additional tools, please visit the BASIS [Addiction Resources](#) page.

— Rhiannon Chou Wiley

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