## INVESTIGATING THE ASSOCIATIONS BETWEEN E-CIGARETTE USE AND CIGARETTE SMOKING AMONG YOUNG ADULTS IN AUSTRALIA

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**Introduction and Aims:** *E-cigarettes are an emerging public health concern, with the most prominent concern being that e-cigarettes serve as a gateway to cigarette smoking. Indeed, recent meta-analyses report a longitudinal association between e-cigarette use and subsequent cigarette smoking initiation (1, 2). To date, this association has not been examined in Australia, one of the few countries with strict policies and laws concerning e-cigarettes. Thus, this study aimed to investigate the associations between e-cigarette use and cigarette smoking over time in a sample of Australian youth.* 

**Method:** Data for this study came from the control group of the long-term follow-up of the Climate Schools Combined study. In total, 1,556 participants (66.8% female) completed online questionnaires assessing e-cigarette use, cigarette smoking, other substance use, externalising behaviours, and mental ill-health at Time 1 ( $M_{age}$ =18.6yrs) in Year 12 and again at Time 2 ( $M_{age}$ =19.44).

**Results:** Among those who had never smoked cigarettes at Time 1, e-cigarette use did not predict subsequent cigarette smoking (OR=1.61, 95% CI=0.35-5.43, p=0.48) at Time 2. Among never e-cigarette users at Time 1, cigarette smoking predicted subsequent e-cigarette at Time 2 (OR=4.75, 95% CI=2.29-9.99, p=<0.001). Notably, this association held when controlling for demographic variables, other substance use, externalising behaviours, and mental ill-health (OR=3.30, 95% CI=1.10-9.96, p=0.03).

**Conclusions:** This study did not find evidence to support e-cigarettes serving as a gateway cigarette smoking initiation. Instead, cigarette smoking predicted later e-cigarette use. Further research is needed to understand the role that the unique Australian context may play in this association.

## References:

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