

# Gender differences in reasons for using electronic cigarettes and device characteristics: Findings from the 2018 ITC Four Country Smoking and Vaping Survey

Yimsaard, P., McNeill, A., Yong, H.H., Cummings, K.M., Chung-Hall, J., Hawkins, S., Quah, A.C.K., Fong, G.T., O'Connor, R.J., & Hitchman, S.C.

## Abstract

**Introduction:** Little is known about why males are more likely to use electronic cigarettes (ECs) compared to females. This study examined gender differences in reasons for vaping and characteristics of EC used (device type, device capacity, e-liquid nicotine strength, and flavour). **Methods:** Data from 3938 current adult (18+ years) at-least-weekly EC users who participated in Wave 2 (2018) ITC Four Country Smoking and Vaping Survey in Canada, the United States, England, and Australia. **Results:** Of the sample, 54% were male. The most commonly cited reasons for vaping in females were 'less harmful to others' (85.8%) and in males were 'less harmful than cigarettes' (85.5%), with females being more likely to cite 'less harmful to others' (adjusted odds ratio (aOR)=1.64, p=0.001) and 'help cut down on cigarettes' (aOR=1.60, p=0.001) than males. Significant gender differences were found in EC device type used ( $\chi^2=35.05$ , p=0.043). Females were less likely to report using e-liquids containing >20 mg/ml of nicotine, and tank devices with >2ml capacity (aOR=0.41, p<0.001 and aOR=0.65, p=0.026, respectively) than males. There was no significant gender difference in use of flavoured e-liquids, with fruit being the most common flavour for both males (54.5%) and females (50.2%). **Conclusion:** There were some gender differences in reasons for vaping and characteristics of the product used. Monitoring of gender differences in patterns of EC use would be useful to inform outreach activities and interventions for EC use. **Implications:** Our findings provide some evidence of gender differences in reasons for vaping and characteristics of EC used. The most common reason for vaping reported by females was 'less harmful to others', which may reflect greater concern by female vapers about the adverse effects of second-hand smoke compared to male vapers. Gender differences might be considered when designing gender sensitive smoking cessation policies. Regarding characteristics of EC products used, we found gender differences in preferences for e-liquid nicotine strength and device capacity. Further studies should examine whether the observed gender differences in EC use reasons and product characteristics are predictive of smoking cessation. Furthermore, studies monitoring gender-based marketing of ECs may be considered.

## Recommended Citation

Yimsaard, P., McNeill, A., Yong, H.H., Cummings, K.M., Chung-Hall, J., Hawkins, S., Quah, A.C.K., Fong, G.T., O'Connor, R.J., Hitchman, S.C. (2021). Gender differences in reasons for using electronic cigarettes and device characteristics: Findings from the 2018 ITC Four Country Smoking and Vaping Survey. *Nicotine and Tobacco Research*, 23(4), 678-686.

**Link To PDF:** <https://academic.oup.com/ntr/article/23/4/678/5913225>