

Title: **Factors Associated with E-Cigarette Use in Young Adults**

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The increase in e-cigarette ever and current use among young people represents a growing concern for tobacco control efforts in Ireland. Identifying factors associated with increasing prevalence offers the opportunity to develop appropriate preventative interventions.

Using cross-sectional data from 5,190 20-year-olds in the Growing up in Ireland (GUI) survey (Wave 4, 2019), we performed stepwise logistic regression analyses to examine e-cigarette prevalence and factors associated with e-cigarette use in this age group.

The prevalence of e-cigarette ever-use was 47.8% and current use was 13.4%. E-cigarette ever and current users were significantly more likely to be male (AOR 1.63 vs 1.71 for females), ever-smokers (AOR:2.99 vs AOR:5.25), current smokers (AOR:1.68 vs AOR:3.22), and ever cannabis users (AOR:2.28 vs AOR:1.97). E-cigarette ever-users were more likely to ever-use alcohol (AOR:3.65) and non-prescribed drugs (AOR:1.44). E-cigarette ever and current use was inversely associated with high leaving certificate points (ever-use: AOR 0.30; current use: 0.49) and being in two-parent families (current use AOR: 0.61).

Ever and current e-cigarette use was high among 20-year-olds in this study. Our findings suggest that poly-drug use needs to be addressed simultaneously with e-cigarette prevention strategies to be successful.

Table 1: Multivariable (stepwise) logistic regression of e-cigarette ever and current use among young adults

	N (%) N=5190	Ever used e-cigarettes N=2460 (47.8%)	Current e-cigarettes use N= 690 (13.4%)
		AOR (95% CI)	AOR (95% CI)
<i>Gender</i>			
Female	2548 (49.10)	Reference	Reference
Male	2642 (50.90)	1.63 (1.37, 1.94)	1.71 (1.30, 2.25)
<i>Religion</i>			
None	1502 (28.99)	Reference	-
Catholic	2831 (54.65)	-	
Other Christian	758 (14.63)	-	
Other	89 (1.72)	0.85 (0.72, 1.01)	
<i>Leaving Cert points</i>			
Low Achieving	1110 (23.32)	Reference	Reference
Medium Achieving	1438 (30.21)	0.58 (0.45, 0.76)	-
Medium High Achieving	1439 (30.23)	0.45 (0.35, 0.58)	0.67 (0.49, 0.92)
High Achieving	773 (16.24)	0.30 (0.23, 0.40)	0.49 (0.32, 0.75)
<i>Ever smoked</i>			
No	1344 (26.10)	Reference	Reference
Yes	3807 (73.90)	2.99 (2.36, 3.78)	5.25 (2.66, 10.34)
<i>Current smoking</i>			
No	3204 (62.20)	Reference	Reference
Yes	1947 (37.80)	1.68 (1.38, 2.04)	3.22 (2.40, 4.31)
<i>Ever alcohol use</i>			
No	185 (3.58)	Reference	-
Yes	4967 (96.42)	3.65 (1.54, 8.62)	
<i>Ever tried cannabis</i>			
No	1992 (39.46)	Reference	Reference
Yes	3055 (60.54)	2.28 (1.88, 2.76)	1.97 (1.41, 2.74)
<i>Ever used non-prescribed drugs</i>			
No	3673 (71.55)	Reference	-
Yes	1460 (28.45)	1.44 (1.14, 1.82)	
<i>Household type</i>			
Single	1139 (23.31)	-	Reference
Couple	3748 (76.69)		0.61 (0.43, 0.85)