

Gender and Sexualities: Associations with Smoking and E-cigarette use in 20 year olds in Ireland

Joan Hanafin, Salome Sunday, Luke Clancy

TobaccoFree Research Institute Ireland, TU Dublin, www.tri.ie

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<https://www.cso.ie/en/aboutus/lgdp/csodatapolicies/dataforresearchers/rmfregister/>

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Background Prevalence of Smoking & E-cigarette Use

- Overall, in Ireland, smoking prevalence in those aged 15 years and older in 2023 was 18%, with higher rates among men (21%) than among women (15%) (Healthy Ireland 2023).
- Prevalence decreased from 23% in 2015 to 17% in 2019, rose again to 18% in 2021 and has been static since (Healthy Ireland 2023).
- Young adults are particularly at risk and the ages between 17 and 19 years are particularly vulnerable ones for smoking initiation (Hanafin et al. 2023).
- *Ever-smoking* among 20 year-olds is high at 74% (source:GUI, Hanafin et al. 2023).
- Estimates of *daily/occasional smoking* range from 21% (among 20 to 24-year-olds, source: CSO 2024) to 37.5% (among 20-year-olds, source:GUI, Hanafin et al. 2023).
- This represents a considerable increase from the ages of 15 to 19 years - proportion of daily or occasional smokers was 6% (CSO 2024).
- Rapid increase in e-cigarette use since 2013 especially among adolescents and young people, and also, more recently, of other nicotine products (Hanafin et al. 2024)



Background

Prevalence and Gender

- Gender differences in smoking are not static over time, reflecting cultural norms and influence of tobacco industry strategies (Hanafin and Clancy 2015).
- Recent analyses of adolescents suggest few gender differences in smoking, but in Ireland males have somewhat higher rates of smoking and much higher rates of e-cigarette use (Sunday et al. 2020).
- As regards transgender young adults - whose gender identity, or their internal sense of being male, female, or something else, does not match the sex they were assigned at birth -
- Few data have been available on smoking and e-cigarette use differences internationally and none in Ireland.



Background

Prevalence and Sexual Orientation

- Significant and longstanding evidence that LGBTQ individuals and other sexual minorities are more likely to use tobacco when compared with cisgender heterosexual adults (e.g., Garofalo et al. 1998, Harlow et al. 2021, Shokoohi et al. 2021), including in Ireland (Kabir et al. 2013, Kavanagh et al. 2024).
- Evidence of higher smoking in sexual minorities linked to their experiences of grave psychosocial stressors throughout their lives that compromise their cardiovascular health (Bass & Nagy 2020) and to smoking as a coping strategy (Rosario et al. 2011).
- Recent systematic review suggests increased levels of minority stress processes (internalized queerphobia, perceived stigma, and prejudice events) represent a contributing factor to smoking health disparities in LGBTQ populations, associated with increased probability of cigarette use (Li et al 2024).
- But little knowledge of e-cigarette use in this population in Ireland.



OBJECTIVES



To examine:
gender and sexuality associations
with -
ever and current smoking and
ever and current e-cigarette use.



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METHODS GUI LONGITUDINAL STUDY



Growing Up in Ireland: the national longitudinal study of children and young people in Ireland. Since 2006, the study has provided Government with an evidence base for informed policy decisions .



Growing Up in Ireland has 2 cohorts ('98 and '08). We use data from 5,190, 20 year-olds from Wave 4 of Cohort '98 (formerly Child Cohort) who reported gender, transgender and sexual orientation, and who reported ever- and current smoking and e-cigarette use.



Analyses were performed using SPSS v27.



METHODS VARIABLES

Questions about GENDER AND SEXUALITY in GUI Surveys (Young Person Self-Complete Questionnaire)

D2. How would you describe your sexual orientation? [TICK ONE BOX]

Response categories: Heterosexual/straight (sexually attracted to the opposite sex), Gay or Lesbian (attracted to the same sex), Bisexual (attracted to both men and women), Questioning/ Not sure, Asexual (not attracted to either sex), Don't know, Prefer not to say

D3. Would you describe yourself as: Male, Female, Other, Prefer not to say

D4. Would you describe yourself as transgender? Yes, No, Prefer not to say



METHODS VARIABLES

Questions about SMOKING AND E-CIGARETTE USE in GUI Surveys

Smoking

Have you ever smoked a cigarette? Yes/No.

Which of the following best describes you? Only ever tried smoking once or twice/ Used to smoke but not now/ Smoke occasionally/ Smoke daily

E-cigarette use

Have you ever tried an e-cigarette or "vaping"? Yes/No

How often, if at all, do you currently use an electronic cigarette? Daily/ Less than daily, but at least once a week/ Less than weekly, but at least once a month/ Less than monthly/ Not at all



RESULTS

Gender and Sexuality

Gender	
Male	2642 (50.9)
Female	2548 (49.1)
Transgender	
Yes	27 (0.5)
No	5101 (98.5)
Sexual Orientation	
Heterosexual/straight	4458 (88.3)
Gay or Lesbian	158 (3.1)
Bisexual	325 (6.4)
Questioning/ Not sure/Other	108 (2.1)

Table 1: Gender and Sexual Orientation reported by 20-year-olds, GUI



RESULTS Smoking, E-cigarette Use, and Sexual Orientation

<i>How would you describe your sexual orientation?</i>	Sexual Orientation		
	Heterosexual/straight 4458 (88.3)	Gay/Lesbian/Bisexual/ Questioning/Other 591 (11.7)	Total 5049 (100.0)
Ever Smoked			
Yes	3311 (88.1)	448 (11.9)	3759 (74.5)
No	1146 (88.9)	143 (11.1)	1289 (25.5)
Current Smoking			
Yes	1649 (85.7)	275 (14.3)	1924 (38.1)
No	2810 (89.9)	316 (10.1)	3126 (61.9)
Ever e-cigarette use			
Yes	2121 (87.0)	316 (13.0)	2437 (48.3)
No	2337 (89.5)	275 (10.5)	2612 (51.7)
Current e-cigarette use			
Yes	603 (88.8)	76 (11.2)	679 (13.4)
No	3855 (88.2)	515 (11.8)	4370 (86.6)

Table 2. Associations with sexuality (20-year-olds, GUI)

Note: Figures shown in Bold are statistically significant at $p < .05$

RESULTS

Smoking, E-cigarette Use, and Transgender Identity

<i>Would you describe yourself as transgender?</i>	Transgender Identity		
	No	Yes	Total
	5101 (99.5)	27 (0.5)	5127 (100.0)
Ever Smoked			
Yes	3775 (99.5)	19 (0.5)	3794 (74.0)
No	1325 (99.4)	8 (0.6)	1333 (26.0)
Current Smoking			
Yes	1926 (99.3)	14 (0.7)	1940 (37.8)
No	3175 (99.6)	13 (0.4)	3188 (62.2)
Ever e-cigarette use			
Yes	2443 (99.6)	11 (0.4)	2454 (47.9)
No	2657 (99.4)	16 (0.6)	2673 (52.1)
Current e-cigarette use			
Yes	687 (99.7)	2 (0.3)	689 (13.4)
No	4414 (99.4)	25 (0.6)	4439 (86.6)

(Note: Figures shown in Bold are statistically significant at $p < .05$)

Table 3. Associations with Transgender Identity (20-year-olds, GUI)

RESULTS : Summary of Gender, Transgender and Sexual Orientation Associations with Smoking and E-cigarette Use

	Ever Smoked OR (95% CI)	Current Smoking OR (95% CI)	Ever e-cigarette use OR (95% CI)	Current e- cigarette use OR (95% CI)
Gender Male Female	Reference 1.00 (0.88, 1.13)	Reference 0.93 (0.83, 1.05)	Reference 0.59 (0.53, 0.66)	Reference 0.60 (0.51, 0.71)
Transgender Status No Yes	Reference 0.85 (0.37, 1.97)	Reference 1.85 (0.87, 3.95)	Reference 0.78 (0.36, 1.68)	Reference 0.45 (0.10, 2.07)
Sexual Orientation Heterosexual/straight Gay/Lesbian/Bisexual/ Questioning/ Other	Reference 1.08 (0.89, 1.32)	Reference 1.49 (1.25, 1.77)	Reference 1.26 (1.06, 1.50)	Reference 0.94 (0.73, 1.22)

Table 4: Logistic Regression Analysis of Smoking and E-cigarette Use by Gender, Transgender and Sexual Orientation, reported by 20-year-olds, GUI

Note: Figures shown in Bold are statistically significant at p<.05

Main Findings Smoking

11.7% (n=591) of 20-year-olds reported being gay, lesbian, bisexual, questioning, or other (LGBQ) and 0.5% (n=27) reported being transgender.

As regards smoking, no significant differences in ever or current smoking were found between males and females or between those who reported being transgender or not.

LGBQ respondents were significantly more likely to be current smokers (OR 1.49, CI 1.25, 1.77).



Main Findings E-cigarette use

Females were significantly less likely to be ever (0.59 CI 0.53, 0.66) or current (0.60 CI 0.51, 0.71) e-cigarette users.

No significant differences between those who reported being transgender or not.

LGBQ respondents were significantly more likely to be ever e-cigarette users (OR 1.26, CI 1.06, 1.50) but not current e-cigarette users.



Conclusions

We confirm a continued raised prevalence of smoking and e-cigarette use in LGBTQ young adults and also of e-cigarette use in cisgender males.

Transgender young adults appear not to be at any higher risk but numbers are very small and a larger sample is needed.

It is recommended that policy and cessation interventions reflect these risks.



Implications for Tobacco Control and Tobacco Endgame:

The halt in the decline in population smoking prevalence is due, to some extent at least, to entrenched smoking and e-cigarette use patterns among some minority groups.



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Contact

Prof Joan Hanafin, Director of Social Research

E: jhanafin@tri.ie

Prof Luke Clancy, Director General

E: lclancy@tri.ie

TobaccoFree Research Institute Ireland

TU Dublin, Dublin 2.

W: www.tri.ie

