Neighbourhood characteristics and alcohol use in adolescents in Ireland

A longitudinal examination of neighbourhood features associated with alcohol use

Anne Doyle







Research. Evidence. Action.

Presentation outline

Alcohol use among young people in Ireland

Factors that influence alcohol use

Neighbourhood features and alcohol use



Background



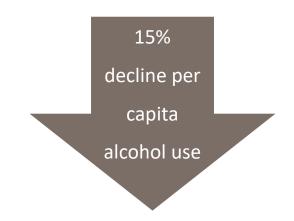


Public Health (Alcohol) Act, 2018

Legislation to prevent/delay alcohol use among children

World Health Organization (WHO) 'best-buy' recommendations

- minimum unit pricing (MUP)
- structural separation
- restriction on sale and advertising of alcohol
- health warning labelling on alcohol products





Delay in alcohol initiation among Irish adolescents has been noted

BUT

- 42.2% of 15 year-olds consumed alcohol
- > 23.5% have been drunk





Irish teens drinking and smoking less — but mental health concerns continue to rise



We are falling out of love with booze: Why Ireland is drinking

less

Significant decline in alcohol, cigarette use by Irish teenagers - study

Updated / Wednesday, 21 May 2025 16:50

RTÉ











News Sport Entertainment Business Lifestyle Culture Gaeilge

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Findings include a notable decline in tobacco use among children, as well as a drop in the number who reported having been drunk or having

Decrease in alcohol, cigarette and cannabis use among school-aged children in Ireland

The University of Galway study has tracked shifts in young people's behaviours over the past 25 years.

Irish adolescents

Global Burden of Disease study - 195 countries

- ➤ Irish girls 3rd highest for levels of binge drinking
- > Irish boys ranked 4th





Alcohol use influences

Multiple social contexts and processes present during adolescence:

- > Family
- Peers
- Personal characteristics
- > School
- Neighbourhood-level factors



Alcohol use influences - Family

- Poor parental monitoring
- Permissive or liberal parental attitudes toward alcohol
- Parental alcohol use especially hazardous drinking
- Provision of alcohol to children
- Poor parent—child relationships/parental support

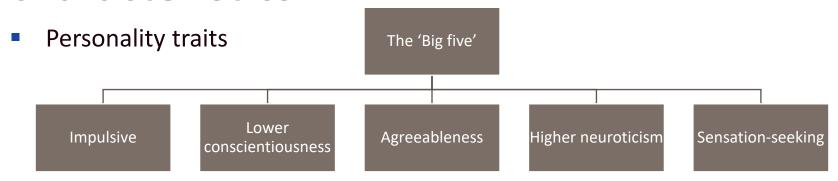


Alcohol use influences - Peers

- Peer pressure/peers alcohol use
- Social modelling observing/imitating the behaviour of others
- Pro-drinking social norms
- Social media alcohol promotion peer influence transitioning into the digital space



Alcohol use influences - Personal characteristics



- Poor mental health
 - Depression or anxiety



Alcohol use influences - School

- Poor academic performance
- Truancy
- Generally negative disposition toward school



Alcohol use influences – Neighbourhood

- Alcohol availability
 - density of alcohol outlets
- Exposure to alcohol marketing

BUT

What about the area we grow up in?





Research questions

Q. Is there an association between neighbourhood characteristics and alcohol use behaviours among adolescents (aged 17/18 years)

Does perception of neighbourhood safety and disorder, the built environment, and urban/rural location predict:

- the age at which alcohol is initiated
- Alcohol Use Disorder Identification Test (AUDIT) score



Methods





Methods

- Growing Up in Ireland Cohort '98
- Two-stage clustered sampling: Primary school system as initial sampling frame
- Initial sample size: 8,568 n (1 in every 7 nine-year olds resident in Ireland)
- 5 waves of data collection completed
- Study population included those who completed Waves 1–4, N=4,729



Results – neighbourhood characteristics





Results – neighbourhood characteristics

!! PRELIMINARY ANALYSIS !!

Wave 1 - Primary caregivers perceptions of the neighbourhood

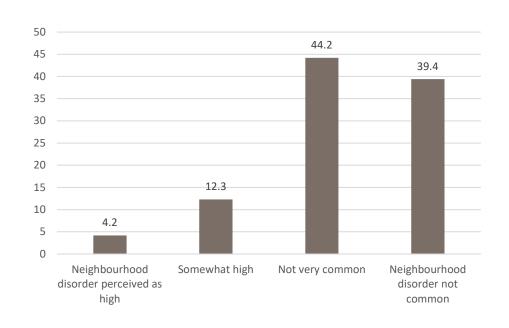
Neighbourhood domains:

- neighbourhood disorder
- neighbourhood safety
- neighbourhood built environment
- urban-rural location based on address



Results – neighbourhood disorder

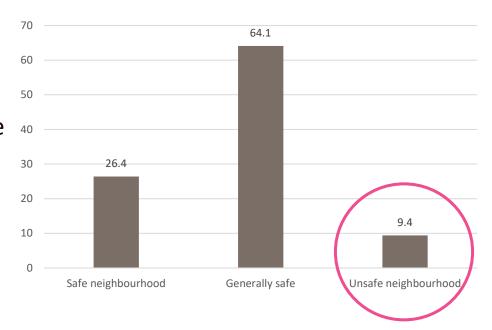
- 1. Rubbish and litter lying about
- 2. Homes and gardens in bad condition
- 3. Vandalism and deliberate damage to property
- People being drunk or taking drugs in public





Results – neighbourhood safety

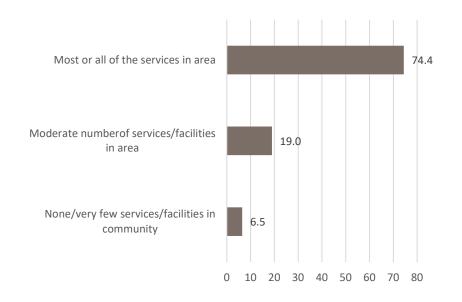
- Safe to walk alone in this area after dark
- 2. Safe for children to play outside during the day in this area
- 3. Safe parks, playgrounds and play spaces in this area





Results – neighbourhood built environment

- 1. Regular public transport
- 2. GP or health clinic
- 3. Primary or secondary schools
- 4. Library
- 5. Social Welfare office
- 6. Banking/Credit Union
- Essential grocery shopping
- 8. Recreational facilities for 9-year-old

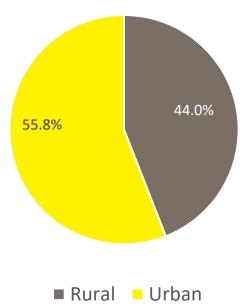




Results – neighbourhood urban-rural location

Description of household location dichotomised into urban or rural*

*Rural definition as per the Census: population of less than 1,500 residents



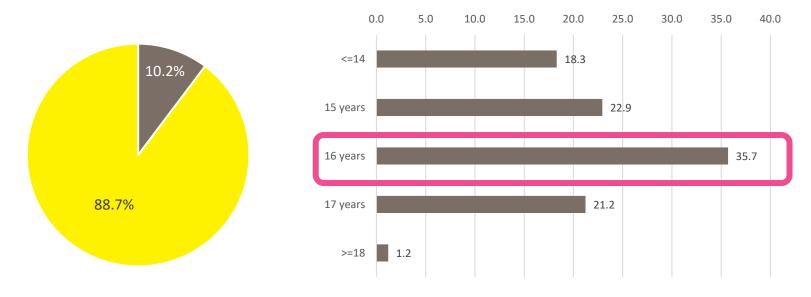


Results – alcohol use





Results – alcohol use at 17/18

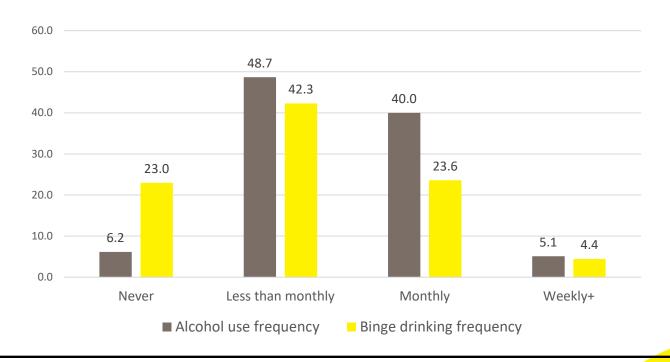


Ever consumed alcohol

Age at first drink

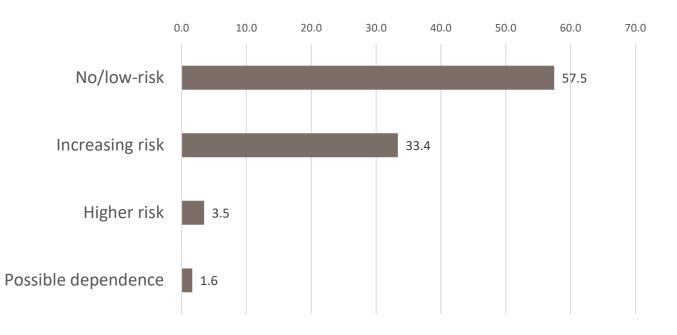


Alcohol use and binge drinking frequency





AUDIT score











Results

- Dependent variables
- alcohol use behaviours
- Independent variables
- neighbourhood characteristics

- Co-variates
- > Sex
- Parental employment status
- Parental education
- **Ethnicity**
- Equivalised household annual income
- Household class
- Degree of ease or difficulty making ends meet



Alcohol use – lifetime (17/18 years)

Predictor	Unadjusted OR (95% CI)	Adjusted OR (95% CI)
Neighbourhood disorder		
Neighbourhood safety		
Built environment		
Urban-rural location		

^{*}p<0.05, **p<0.001



Predictor	Unadjusted β (95% CI)	Adjusted β (95% CI)
Neighbourhood disorder	*	
Neighbourhood safety		*
Built environment		
Urban-rural location	**	**

^{*}p<0.05, **p<0.001



Predictor	Unadjusted β (95% CI)	Adjusted β (95% CI)
Neighbourhood disorder	*	
Neighbourhood safety		*
Built environment		
Urban-rural location	**	**

^{*}p<0.05, **p<0.001



Predictor	Unadjusted β (95% CI)	Adjusted β (95% CI)
Neighbourhood disorder	*	
Neighbourhood safety		*
Built environment		
Urban-rural location	**	**

^{*}p<0.05, **p<0.001



Predictor	Unadjusted β (95% CI)	Adjusted β (95% CI)
Neighbourhood disorder	*	
Neighbourhood safety		*
Built environment		
Urban-rural location	**	**

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Alcohol use frequency

Predictor	Unadjusted β (95% CI)	Adjusted β (95% CI)
Neighbourhood disorder		
Neighbourhood safety		
Built environment	*	
Urban-rural location		

^{*}p<0.05, **p<0.001



Binge drinking frequency

Predictor	Unadjusted β (95% CI)	Adjusted β (95% CI)
Neighbourhood disorder	*	
Neighbourhood safety	*	*
Built environment	*	
Urban-rural location	*	

^{*}p<0.05, **p<0.001



Predictor	Unadjusted β (95% CI)	Adjusted β (95% CI)
Neighbourhood disorder	*	
Neighbourhood safety	*	*
Built environment	*	
Urban-rural location	*	

^{*}p<0.05, **p<0.001



Predictor	Unadjusted β (95% CI)	Adjusted β (95% CI)
Neighbourhood disorder	*	
Neighbourhood safety	*	*
Built environment	*	
Urban-rural location	*	

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Predictor	Unadjusted β (95% CI)	Adjusted β (95% CI)
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AUDIT score

Predictor	Unadjusted β (95% CI)	Adjusted β (95% CI)
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AUDIT score

Data is redacted as not yet published

Predictor	Unadjusted β (95% CI)	Adjusted β (95% CI)
Neighbourhood disorder	*	
Neighbourhood safety		
Built environment		
Urban-rural location		

*p<0.05, **p<0.001



Findings

- High prevalence of alcohol use among adolescents
- Typically begin at 16
- No particularly strong association between alcohol use and neighbourhood characteristics especially when adjusted for co-variates



Findings

- Adjusted regression positive significant associations:
 - ➤ Neighbourhood safety alcohol initiation
 - Neighbourhood safety binge drinking frequency
 - Urban area alcohol initiation



LOCATION



Strengths and limitations

STRENGTHS

- Policy-relevant research gap
- Identification of longitudinal predictors
- Large, nationally representative sample

LIMITATIONS

Inter-wave attrition - adjusted for using provided survey weights



Recommendations

- ☐ Strengthen provisions of Public Health (Alcohol) Act, 2018
- Carefully consider additional licenced premises
 - > especially around schools and areas of disadvantage
- Community-specific prevention programmes



Acknowledgements

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Thanks to my co-authors



Thank you

adoyle@hrb.ie X @amcdoyle





