

Adolescent alcohol use and school disengagement

Investigating alcohol use patterns in adolescence and pathways to being NEET (Not in Employment, Education or Training).

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Key findings

- Three distinct profiles of adolescent drinking were identified (Late Onsetters, Steady Increasers, Minimal Users), all of which showed stable and linear patterns of alcohol growth over time.
- Some factors were more important for certain trajectories, such as disengagement and attitudes at different age periods, and the later likelihood of being NEET.
- Regular drinking by mid adolescence has the potential to determine life trajectories by adversely affecting successful transitions between roles and statuses such as gaining employment or commencing training after leaving school.
- Understanding the complex interplay between regular drinking and employment marginalisation among young adults is crucial in developing targeted interventions.

Research team

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Background

Alcohol use during the teenage years is a persistent and growing public health concern both at a national and international level. Findings from the 2011 European School Survey Project on Alcohol and Other Drugs (ESPAD) (Hibell, Guttormsson & Ahlstrom, 2012) reported high prevalence rates for alcohol use in the UK with as many as 90% of pupils reporting lifetime alcohol use. Rates of use in the previous 12 months and last 30 days were 85% and 65%, respectively, which were notably higher than ESPAD averages (87%, 79% and 57% respectively). We know that for some, adolescent alcohol use has been linked to a range of health and social problems (both short and long-term) including anti-social behaviour and delinquency (Felson, Teasdale & Burchfield, 2008; MacArthur et al., 2012), poor mental health outcomes including self-harm and depression (MacArthur et al., 2012) and hospital admissions (by children under 18 years) for alcohol poisoning and/or acute intoxication (Institute of Alcohol Studies UK, 2013). However, alcohol use has also been associated with school disengagement and academic achievements which may impact on educational and employment outcomes or being NEET later in life, having wide implications for policy and practice.

EU policy makers are increasingly using the concept of NEET – 'not in employment, education or training' as a measure of disengagement from the labour market and perhaps from society in general (Eurofound, 2012). The European Commission Employment Committee (EMCO) defines NEET as including young people aged 15-24 years who are unemployed or inactive and who are not attending education or training

courses (Eurofound, 2013). In 2011, approx. 12.9% of 15-24 years olds in the EU were in the NEET group, equating to 7.5 million young people (Eurofound, 2015). Recent estimates for the UK report 963,000 people aged 16-24 were NEET in the fourth quarter of 2014, equating to 13.1 per cent of this age group (Mirza-Davies, 2015). The proportion of 15-19 year olds and 20-24 year olds who are NEET in the UK is above the OECD average (Mirza-Davies, 2015). The economic cost of not integrating NEETs is estimated at over €150 billion (EMCC, 2015). Spending time as NEET may lead to a wide range of social disadvantages, such as disaffection/alienation, insecure and poor employment prospects, delinquency, youth offending, and mental and physical health problems (Eurofound, 2012, 2013). This report, drawing on ten years of longitudinal data from the Belfast Youth Development Study (BYDS), investigated adolescent alcohol use patterns and school disengagement and pathways to being NEET (in early adulthood).

While we know that these associations exist to date there remains more limited knowledge on the complex interplay, including the temporal order, between alcohol use during adolescence and other factors like school disengagement, poor educational outcomes and longer term negative trajectories. It is also not clear if it is possible to even theoretically identify those at heightened risk at an earlier time point based on these patterns of alcohol use and concomitant problems.

The Project aimed to:

- To test different causal hypotheses explaining the longitudinal relationship between alcohol use trajectories and being NEET (Not in Education, Employment or Training).
- To test the role of disengagement in influencing individual drinking trajectories and of being NEET at age 20/21.
- To investigate how other factors (e.g. parental monitoring, drug use) influence and are associated with alcohol use.

This study used data from the Belfast Youth Development Study (BYDS), the BYDS began in 2000 in Northern Ireland, followed a cohort of young people entering their first year of secondary school (11/12 years of age), surveyed them annually for the following five years of compulsory schooling as well as in the successive year (2007) whether at school or not, and again in 2010/11 (aged 21/22 years). To date over 4,500 respondents have provided data across the survey. Each year respondents answered questions on several topics: such as substance use habits, family attachment and parental monitoring (Kerr & Stattin, 2010), school attitudes, behaviour and educational aspirations. As there was a very low rate of absentees and refusals in each wave of data collection, measures collected from all pupils captured information not only on relationships with their parents and school, but also data on how their friends in school behave and interact with their families. Thus, in comparison with other studies, the strengths of BYDS are: (a) the collection of closely-paced longitudinal information, which allows for more precise descriptions of developmental processes and mechanisms. This report is based on data from the seven years of the study with a particular focus on parental monitoring, school and individual characteristics and information on frequency of alcohol use.

We used Latent Class Growth Analysis (LCGA) to investigate individual differences in the trajectories of alcohol use. LCGA is part of the "mixture model" family: the assumption of this method is that there are different groups of individuals that display different trajectories in the variable considered: individuals within one group display similar trajectories to other individuals in the same group, but they differ in their trajectories compared to individuals in other groups. The groups considered are mutually exclusive and exhaustive.

LCGA also assumes that all individuals in the same group behave in the same way (i.e. show the same trajectories, have the same growth parameters: therefore, no individual variability within groups is allowed). These different groups with different trajectories are not directly observable, but their group membership could be inferred by observing their behaviour across time and using probabilistic methods (Muthen & Muthen, 2000).

Findings

We found that the course of drinking over a five year period is variable and influenced by a range of factors. In the early years of the study, very few respondents drank frequently. In later years, a greater proportion reported drinking alcohol every week or more often (from years one to five).

We found that young people's attitudes towards school (a proxy for disengagement) increased over the course of the study. The results suggested that young people's attitude became more positive over time and particularly in the latter two years of school.

We found that a large proportion of respondents had achieved GCSE grades A-C, with approximately three quarters having achieved AS/A-levels, and the majority being in part-time employment at age 16/17. We further established that around two thirds of the sample achieved third level education at age 20/21 and a considerable proportion of the sample were in education with a smaller proportion being in either part-time or full-time employment.

We used Latent Class Growth Analysis to estimate the number of alcohol use trajectories and found three profiles of drinkers could be used to represent their longitudinal course of alcohol consumption: 'Late Onsetters', 'Steady Increasers' and 'Minimal Users', with each displaying different levels of alcohol use throughout the school years.

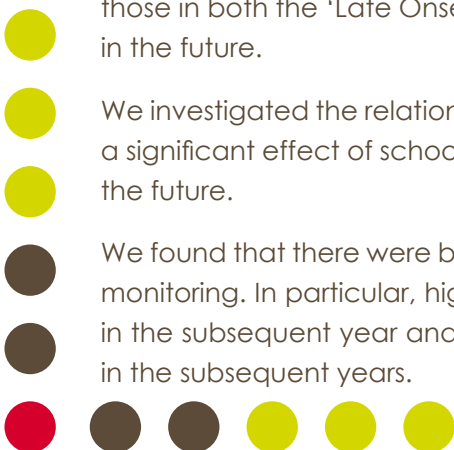
We found that the estimated mean growth parameters for each class indicated significant variation in the initial levels of the three drinking profiles established, however, this pattern indicated a significant linear trend. Overall, our results suggested that individuals belonging to the 'Late Onsetters', the largest group in the study, may be particularly vulnerable to the negative outcomes associated with adolescent alcohol use and disengagement in school.

We investigated the association between group membership and school disengagement and found that disengagement was predictive of being in the 'Late Onsetters' and 'Steady Increasers' groups while school engagement predicted being in the 'Minimal Users' group and this effect was particularly salient in year 5 of school.

We investigated the association between group membership and being NEET at age 20/21 and found those in both the 'Late Onsetters' and 'Steady Increasers' groups to be significantly more likely to be NEET in the future.

We investigated the relationship between school disengagement and being NEET at age 20/21 and found a significant effect of school attitude in each year of formal education and the likelihood of being NEET in the future.

We found that there were bi-directional causal mechanisms operating between alcohol use and parental monitoring. In particular, higher levels of alcohol were associated with lower rates of parental monitoring in the subsequent year and greater parental monitoring was associated with a lower rate of alcohol use in the subsequent years.



Finally, we found that young people in the latter years of formal education were also regularly taking illegal substances such as cannabis alongside using alcohol. Overall, we found that males were more likely to report weekly cannabis use and they were more likely to be in receipt of free school meals. We also found that parental monitoring was a protective factor as was good teacher-student relationships. We also found that school disengagement was only associated with cannabis use in the last year of school and only among females.

Implications

This study made a novel and valuable contribution to the extant literature via use of longitudinal data, allowing us to shed light on the order of events for young people, compared to cross-sectional studies. The results revealed differences in alcohol use patterns across the five years of compulsory schooling. Typologies of drinking trajectories were predicted by disengagement which was further associated and predictive of being NEET at age 20/21. The study revealed the pervasiveness of drinking by mid-adolescence, a result consistent with an extensive range of studies on the variability of drinking in the teenage years (Mirza-Davies, 2015).

The presence of the diversity found in our developmental trajectories of alcohol use has important implications for both theory and practice. Conceptually, the diversity of the pathways underscores the importance of targeting interventions that promote school engagement particularly in year 5 of formal education. Increasing school engagement will require individualised needs assessment, careful program design, implementation and integration both within and out of school between educators and practitioners to effectively tackle the problem. Given that young people perceive relatively little risk with regular drinking, campaigns both in and out of school should focus on the consequences of alcohol-related problems that both appeal and are relevant to the young person.

Our findings may be of policy importance for interventions around drinking and being NEET at age 20/21, especially targeted in year 5 of formal education. Public health initiatives have centred on reducing overall alcohol intake amongst adolescents and young adults through community education programmes that focus on safe drinking, school based interventions or higher level measures such as increasing the price of alcohol and reducing access to alcohol for young people (Murgaff, Abraham & Mc Dermott, 2007).

Conclusion

The findings of this study are of importance to the academic understanding of adolescent development and alcohol use, and to the field of alcohol harm reduction, family support, and youth alcohol policy. The research conclusions of this study demonstrate the need to go beyond conceptualising adolescent alcohol use in isolation and to examine in more detail how other mediating variables may contribute to the overall relationship. This study has identified mechanisms specific to the differing alcohol trajectories across a large sample of young people. Our findings uniquely highlight the importance of understanding the complex interplay of individual, school, family and environmental factors. Consistent with the findings from Fergusson, Horwood and Woodward, (2001) adolescent alcohol use cannot be regarded as an isolated factor, but rather seen in a context of a large number of intervening variables, that individually create small contributions to the risk of negative outcomes, but in combination; crucially impact upon individual adjustment and later likelihood of being NEET.

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