

# Investigating Parental Monitoring, School And Family Influences On Adolescent Alcohol Use

April 2013

# **Key findings**

- Children whose parents exert greater control over their free time activities tend to drink less frequently. Early control has a lasting influence on alcohol use
- Higher rates of drinking in early adolescence leads to reduced levels of parent-controlled boundaries and limits at home
- · Being in a school with a higher proportion of frequent drinkers is a risk factor for frequent drinking
- Girls who attend single-sex post-primary schools tend to drink more than pupils attending co-educational schools or male-only schools

#### Research team

Dr. Kathryn Higgins, Dr. Mark McCann, Dr. Aisling McLaughlin, Ms. Claire McCartan, Dr. Oliver PerraInstitute of Child Care Research, Queen's University Belfast

## **Background**

Adolescence is a dynamic developmental period, during which young people develop behaviours and habits that affect their health and social outcomes. Teenage drinking in particular has become a major public health concern, with under-18s consuming more alcohol than in previous generations, seduced by a new range of alcoholic drinks designed for the brand-savvy youth consumer. Adolescent alcohol use has been associated with delinquency and violence (Peleg-Oren et al., 2009; Felson, Teasdale & Burchfield, 2008; Ellickson, Tucker & Klein, 2003); early sexual debut and risky sexual behaviour (Fergusson & Lynskey, 1996; Cavazos-Rehg et al., 2010) and poor academic performance (Balsa, Giuliano, & French, 2011; Peleg-Oren et al., 2009; Barry, Chaney & Chaney, 2011).

A thorough understanding of adolescent substance use must consider the complex interplay among adolescents, their families, and their social environments (Cleveland, Feinberg & Greenberg, 2010). The family is a key influence on children's and young people's behaviour (Sondhi & Turner, 2011); however, interventions at the level of the family that aim to reduce adolescent behaviour have weak effects overall (Smit et al., 2008). As young people get older, primary influences tend to move from the parents to the peer group and other societal factors (Armsden, and Greenberg, 1987).

While the primary social influence on young people moves from the parents to the peer group, less work has investigated the extent to which young people themselves may influence their home lives. Few studies have used longitudinal data to test the differential influence of parents on adolescents, or conversely adolescents on their parents (Kerr, Stattin & Burk, 2010). The Belfast Youth Development Study, having collected data on parental monitoring and alcohol use across the early adolescent years is able to provide answers to these questions.

# **Project aims**



- To test different causal hypotheses explaining the longitudinal relationship between parental monitoring and alcohol use trajectories
- To test the role of peer-and school-level factors in influencing individual drinking trajectories and monitoring
- To investigate how patterns of monitoring dimensions (e.g. parental control and child disclosure) and their association with alcohol use change when considering other factors

### **Methods**

This study used data from the Belfast Youth Development Study, a longitudinal study of substance use during adolescence. Between 2000 and 2011, children attending over 40 schools, colleges and special educational programmes were given questionnaires on a range of personal, social, health and substance use issues. Seven data sweeps took place during this period. Pupils were in their first year of secondary school (around age 11) at the start of the study (academic year 2000/2001), were surveyed annually until 2006/2007 (around age 17) whether they were still attending school, were in a further education college, or no longer in education. They were surveyed again around ten years since they first participated (2011). This report is based on data from the first five years of the study.

The study collected information from young people about the rates of parental monitoring, parental control, parental solicitation and child disclosure and information on frequency of alcohol use (never, rarely, monthly, weekly or more often) across each year. It also collected information on the quality of the parent adolescent relationship, using the Inventory of Peer and Parental Attachment – parent scale. Further information relating to household affluence (holidays per year, car availability, free school meals, type of house etc.), mental health (Strengths and Difficulties Questionnaire), and living arrangements (two biological parents, single parents, reconstituted family) was also collected to account for other influences on rates of alcohol use.

Structural equation modelling was used to assess simultaneously the effect of monitoring on subsequent alcohol use, and the effect of alcohol use on subsequent rates of monitoring, after accounting for background influences, and prior alcohol use or previous levels of parental monitoring). These models thus gave an indication of the extent to which each process influenced the other, rather than assessing the unidirectional influence of monitoring on alcohol use. Multilevel modelling approaches were then used to assess the extent to which the effect of monitoring on alcohol use, and alcohol use on monitoring varied between schools. Finally, further structural equation models assessed the direct and indirect associations between monitoring and alcohol use, after considering the effect of other family and school influences. Mplus and Stata were used for all analyses.

## **Findings**

We found evidence of a bi-directional association between frequency of alcohol use and parental monitoring, weighted towards monitoring being the more influential factor. Young people who were drinking alcohol tended to experience less parental monitoring in later years. After accounting for the influence of other family and individual characteristics, this effect was rather modest, except in the case of those who had started drinking by age 11. Those reporting early drinking experienced lower rates of subsequent monitoring; the reducing effect was three times larger than that occurring in later years.



Three methods by which parents could obtain monitoring information from their children were assessed in the study, each of these having a different association with alcohol use. Parental solicitation showed virtually no association with alcohol use. Parental control by comparison was very strongly associated with alcohol use. Respondents whose parents exerted greater control over their free time activities tended to drink less frequently, this was a consistent effect across time, and early control had a lasting influence on alcohol use.

There was a distinct pattern suggesting alcohol use led to lower levels of parental control. This was a consistent and long term effect, with higher rates of drinking at early ages leading to lower control, drinking at age 11 was predictive of control levels at age 16. Voluntary disclosure of the respondents' activities to parents was also associated with lower alcohol use, although this effect tended to reduce at older ages, to the extent that it appeared unrelated to alcohol use by age 15/16. Alcohol use was associated with slightly lower rates of disclosure in subsequent years, this again is a marginal effect by comparison to the effect of disclosure on alcohol use.

The study did not uncover gender differences, neither in the influence of monitoring on alcohol use, nor in the tendency for alcohol use to affect monitoring.

Even after accounting for the factors that influence individual drinking rates, some schools had higher rates of drinking than others. School factors accounted for around 6% of the variation in rates of drinking between individuals. The effect of parental monitoring differed between schools. In most schools, parental monitoring was protective against alcohol use, but in some schools there was little to no protective effect. This pattern was the same for all monitoring scales, apart from parental solicitation which showed no association with alcohol use in the first place. There was no evidence that parental monitoring varied according to the school pupils attended.

Being in a school with a higher proportion of frequent drinkers was a risk factor for frequent drinking. Pupils attending girls only schools had elevated drinking rates compared to those attending co-educational schools, while boys schools did not differ from co-educational schools.

There was no strong evidence towards selective use of monitoring strategies among the cohort; respondents who reported high levels of monitoring on one scale tended to report high values on all other scales. Statistical tests indicated that the most efficient description of the patterns in the data was by three groups; low, medium and high monitoring. People within each group reported high, medium or low levels on all four scales, monitoring, solicitation, control and disclosure.

The final stage of analysis looked at the relationship between monitoring, attachment and alcohol use. When examined in isolation, good parental attachment and higher levels of monitoring both had a protective effect to reduce frequency of alcohol use. When looking at the inter-relationship between these factors, parental attachment showed a negligible net effect on alcohol use; this is because parental attachment simultaneously reduces the likelihood of a young person's drinking, while simultaneously reducing the extent to which they are monitored. Lower monitoring in turn increases their likelihood of drinking.

## **Implications**

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 scale of this research makes it rather exceptional in the investigation of the interaction between adolescent and family behaviour; it is the size of this study that allowed us to uncover both environment-driven, and youth-driven influences of greater alcohol use being followed by lower monitoring, making an important contribution to the current understanding of the monitoring – child behaviour literature.

The ability to investigate between school differences underlines the importance of the wider context of alcohol use beyond the influence of the family. Any attempt to improve alcohol outcomes must take into account how the relative influence of parents and peers changes with age.

Lastly, these findings have demonstrated how policies or practices which target a single aspect of social functioning are likely to be inadequate in achieving improved outcomes for young people. Influencing one aspect of family functioning will have knock-on consequences for other aspects of family life and subsequent adolescent outcomes, and all of these influences are further limited depending on the relative influence of school and peer environments.

#### References

Armsden, GC. & Greenberg, MT. "The inventory of parent and peer attachment: Individual differences and their relationship to psychological well-being in adolescence." *Journal of youth and adolescence* 16.5 (1987): 427-454.

Barry, A.E., Chaney, B. & Chaney, J.D. (2011). The Impact of Truant and Alcohol-Related Behavior on Educational Aspirations: A Study of US High School Seniors. *The Journal of School Health*, 81 (8), 485-492.

Balsa, A.I., Giuliano, L.M., French, M.T. (2011). The effects of alcohol use on academic achievement in high school. *Economics of Education Review*, 30 (1), 1-15.

Cavazos-Rehg, P.A., Spitznagel, E.L., Bucholz, K.K., Nurnberger, J., Edenberg, H.J., Kramer, J.R., Kuperman, S., Hesselbrock, V., Bierut, L.J. (2010). Predictors of Sexual Debut at Age 16 or Younger. *Archives of Sexual Behaviour*, 39(3), 664-673.

Cleveland, M.J., Feinberg, M.E. & Greenberg, M.T. (2010). Protective families in high-and low-risk environments: implications for adolescent substance use. *Journal of Youth and Adolescence*, 39, 114-126.

Ellickson, P.L. Tucker, J.S., Klein, D.J. (2003). Ten-year prospective study of public health problems associated with early drinking. *Pediatrics*, 111: 949-55.

Felson, R.B., Teasdale, B. & Burchfield, K.B. (2008). The influence of being under the influence: Alcohol effects on adolescent violence. Journal of Research in Crime and Delinquency, 45 (2), 119-141.

Fergusson, D.M. & Lynskey, M.T. (1996). Alcohol misuse and adolescent sexual behaviors and risk taking. *Pediatrics*, 98:91-6.

Kerr, M., Stattin, H. and Burk, W.J. (2010). A Reinterpretation of Parental Monitoring in Longitudinal Perspective. Journal of Research on Adolescence, 20(1), 39-64.

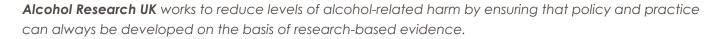
Peleg-Oren, N., Saint-Jean, G., Cardenas, G.A., Tammara, H. & Pierre, C. (2009). Drinking Alcohol before Age 13 and Negative Outcomes in Late Adolescence 1 Source: Alcoholism-Clinical and Experimental Research, 33(11), 1966-1972.



Smit, E., Verdurmen, J., Monshouwer, K. and Smit, F. (2008). Family interventions and their effect on adolescent alcohol use in general populations; a meta-analysis of randomized controlled trials. *Drug and alcohol dependence*, 97(3), 195-206.

Sondhi, A. & Turner, C. (2011). The influence of family and friends on young people's drinking. York: Joseph Rowntree Foundation.

**Download the Final Report** 



We are a lead funder of high quality research into the causes, impact and prevention of alcohol-related harm and are the only organisation exclusively dedicated to building an evidence base in this area.

Read more reports at <a href="https://www.alcoholresearchuk.org">www.alcoholresearchuk.org</a>

Alcohol Research UK, 4th Floor Willow House, London SW1P 1JH 0207 8217880 Registered charity 1140287