


DRUG & ALCOHOL FINDINGS Research

analysis

This entry is our analysis of a study considered particularly relevant to improving outcomes from drug or alcohol interventions in the UK. The original study was not published by Findings; click [Title](#) to order a copy. Free reprints may be available from the authors – click [prepared e-mail](#). [Links](#) to other documents. [Hover over](#) for notes. [Click to](#) highlight passage referred to. [Unfold extra text](#)  The Summary conveys the findings and views expressed in the study. Below is a commentary from Drug and Alcohol Findings.

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► Long-term effects of a parent and student intervention on alcohol use in adolescents: a cluster randomized controlled trial.

Koning I.M., van den Eijnden R.J., Verdurmen J.E. et al.

American Journal of Preventive Medicine: 2011, 40(5), p. 541–547.

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In this Dutch study, promoting parental rule setting and classroom alcohol education together nearly halved the proportion of adolescents who went on to drink heavily. Rarely have such strong and sustained drinking prevention impacts been recorded from these types of interventions.

SUMMARY This Dutch study tested the long-term impact of the Örebro intervention (first developed [and tested](#) in Sweden) targeting parental rule-setting in relation to the drinking of their adolescent children, allied with classroom alcohol education. The parenting element entailed a brief presentation from an alcohol expert at the first parents' meeting at the start of each school year on the adverse effects of youth drinking and the negative effects of permissive parental attitudes towards children's alcohol use. After this parents of children from the same class were meant to meet to agree a shared set of rules about alcohol use. In fact, only half the schools did this; the remainder used the later mailing to send a checklist of candidate rules to parents for them to select from and return to the school. Three weeks after this meeting, a summary of the presentation and the result of the classroom discussion was sent to parents' home addresses. Classroom alcohol education consisted of four lessons from trained teachers at the schools plus a booster a year later, using mainly computerised modules to foster a healthy attitude to drinking and to train the pupils in how to refuse offers of alcohol.

The 19 schools which joined the study were randomly allocated to the parenting intervention alone, to classroom alcohol education alone, to the combination of both, or to act as **control** schools which carried on with **alcohol education as usual**.

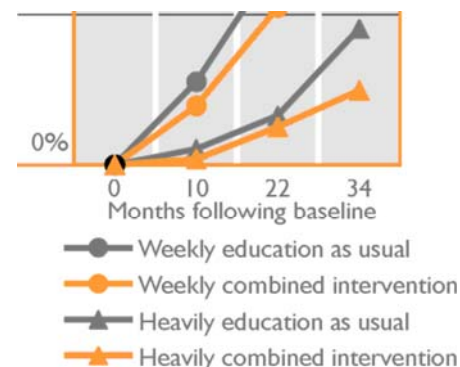
An [earlier paper](#) from the same study reported that relative to education as usual, among the 2937 (of 3490) 12–13-year-olds not already drinking weekly and who met other criteria for the study, the combined parenting and education intervention curbed the initiation of weekly drinking and **heavy** weekly drinking over the next 22 months (and reduced the frequency of drinking). In contrast, on their own, neither the parenting elements nor the lessons made any significant difference when the whole sample of children not yet drinking weekly at the start were included in the analyses.

Main findings

The featured report tested whether these effects were still apparent a year later, 34 months after the start of the study and when the pupils averaged just over 15 years of age, a time when two thirds of Dutch youngsters are already drinking weekly and will soon (age 16) be able to legally buy alcohol. Of the 2937 in the initial sample of non-weekly drinkers, 2533 (86%) completed the follow-up assessment.



The probable responses of the remainder were estimated on the basis of prior assessments and other data. As before, the parenting elements or alcohol education alone had made no statistically significant differences to drinking, but the impacts of both together in retarding uptake of weekly and heavy weekly drinking were greater than a year before [▶ chart](#). Compared to 59% and 27% in education-as-usual control schools, after the combined intervention 49% and 15% of pupils were drinking weekly or drinking heavily each week. After adjusting for other factors, the results meant that in combined intervention schools, the odds of these patterns of drinking versus less extreme drinking had been reduced to 0.69 relative to education as usual, highly statistically significant findings. Put another way, for every four pupils allocated to parenting plus alcohol education, one was prevented from drinking weekly and also one from drinking heavily each week at age 15.



The authors' conclusions

In a liberal drinking culture where adolescent and underage drinking is common, targeting both parents and young adolescent pupils (but not either on their own) exercises a sustained and substantial restraining influence on the development of regular and regular heavy drinking as the youngsters approach the legal alcohol purchase age. The findings underline the need to target adolescents as well as their parents and of targeting adolescents at an early age, before they start to drink regularly and when family factors are a major influence on youth drinking. Doing so has the potential to create appreciable public health gains.

FINDINGS COMMENTARY As well as being unusually sustained, impacts on drinking in this study were several times greater and more consistent than those typical of alcohol prevention programmes applied universally to the entire youth population. This is the case even in respect of programmes [recognised as effective](#) and usually far more costly and difficult to implement. On the face of it there seems no reason why similar impacts should not be seen in the UK which has a similar drinking culture. As in the Netherlands, the outcomes assessed and especially regular heavy drinking are realistic targets associated with potentially important public health gains. The study is the second to have found that the parental intervention on its own was ineffective, contradicting the original Swedish trial. However, it does suggest that in the UK as in the Netherlands, a suitably adjusted version of the parenting intervention might be a worthwhile *addition* to alcohol use prevention lessons as long as parents can effectively be reached and persuaded to be stricter about their children's drinking. On both counts there must be some doubt but so too must there have been in the Netherlands. These points are expanded on below. The researchers also produced [a later report](#), examining how the effects of the intervention varied among adolescents who had differing levels of self-control or whose parents had different rules about or attitudes toward alcohol. The intervention was found to be effective at delaying the onset of regular drinking only among children with low self-control or whose parents were lenient.

If the Örebro intervention is effective at curbing the development of drinking and heavy drinking, it seems it will be the exception among programmes targeted at parents, especially those applied to children in general, not just those at higher risk of drinking problems. In 2019 a comprehensive systematic review amalgamating findings from relevant studies [found little evidence](#) that interventions with parents or families are effective in reducing adolescent drinking compared to no intervention or standard care, or a child-focused intervention alone.

More about the featured study

[Another report](#) on the featured study investigated how the short-term outcomes came about. Ten months after the study started parents exposed to the parenting intervention (whether or not their children had also had alcohol prevention lessons in school) were found to have developed stricter attitudes and rules about youth alcohol use compared to parents not exposed to the intervention. In turn these attitudes and rules were associated



to a statistically significant degree with fewer children starting to drink on at least a weekly basis a year later. Linking these two elements in the chain, it was found that the parent intervention on its own was related to less weekly drinking via stricter parental rule-setting. When combined with school prevention lessons, the link was via stronger parental attitudes against adolescent drinking. Rule-setting and attitudes were themselves related, stricter attitudes probably leading to stricter rule-setting. The combined intervention also affected weekly drinking via the childrens' perceptions that their parents were setting relatively strict rules about drinking and the childrens' own stronger self-control. The combined intervention also hardened the childrens' attitudes to youth drinking but this was not related to their own later weekly drinking. In contrast to the parent intervention with or without prevention lessons, the lessons on their own had no impact on parent or adolescent attitude or rule-setting variables and no impact on drinking directly or via these variables.

A [later report](#) from the same study showed that reductions in heavy weekend drinking from the combined programme persisted to age 16, the legal drinking age in the Netherlands. The reduction in the proportions of pupils engaging in heavy weekend drinking seemed due a delayed onset of drinking, greater self-control, and the perception of stricter parental rules about drinking. The first two factors were also related to a reduction in the amounts drunk at weekends. The main question mark over the findings is that relatively few children could be followed up at age 16, over four years after the start of the trial – of those randomly allocated to the combined programme, just 193 out of 812.

While convincing and methodologically sound, the study has some limitations. 80 schools were asked to join the study before the required 20 were found, 60 having refused to join. If schools participated because they were unusually committed to alcohol prevention, their outcomes might not be replicated (for example, because other schools might not implement the interventions as diligently) across schools in general. However, the analysts say most schools refused simply because they already hosted other research projects. Though this was adjusted for in the analyses, 57% of pupils in control schools but just 33% in combined intervention schools were being taught at the lower vocational education level, a difference which raises concerns that the schools and/or their catchment populations may have differed in other ways not captured by the study. On the other hand, this disparity also applied to parenting-only and alcohol education-only schools, suggesting that it was not a cause of differences in drinking outcomes.

Other studies of the Örebro programme

In the [original trial](#) conducted in Sweden by the programme's developers, the parental intervention on its own was found to halve the increase in the frequency of drunkenness between ages 13 and 16 both among pupils in general and among high risk pupils who had already been drunk at age 13. Though the intervention had focused on drinking, there were also statistically significant and medium to large reductions in criminal or antisocial behaviour. As expected, the programme seemed to have worked by maintaining the parents' strict anti-drinking norms.

However, a [later Swedish trial](#) failed to replicate these findings. It tested the programme's effectiveness in a study conducted by independent researchers not involved in its development, and using the current (in Sweden) widely disseminated version of the programme presented by experienced Örebro presenters. Though the programme was fairly fully implemented, it had no reliable effects on regular drinking or on drunkenness, and the apparent impacts on parental attitudes and behaviour may have been due to parents and children exposed to the Örebro programme being more likely to give the responses 'approved' by the programme.

Getting parents involved

Efforts to involve parents have generally been more elaborate but less successful than the one trialled in the featured study. A [meta-analysis](#) combining findings from randomised studies of parent-focused substance use prevention programmes [found modest effects](#) in the form of fewer adolescent children starting to drink and a lower frequency of drinking. This was particularly the case when whole schools were engaged in the intervention, offering an opportunity for pupils and parents who



participated in the programme to influence those who did not. However, the findings were undermined by a general failure to account for families which were unable to be followed up.

A common practical problem is getting parents to participate in face-to-face substance use prevention programmes. Typically in Britain (see for example [1](#) [2](#) [3](#)) and [elsewhere in Europe](#), attendance is very low, especially among parents most in need of parenting support and with lenient attitudes to substance use. Generally in these studies the attempt was to encourage attendance at special add-on events. On this count the featured study's strategy of incorporating prevention in to the school's core parent involvement programme has a distinct advantage. The downside is that at these events schools have a limited time in which communicate with parents; educational and other social issues (such as knife-carrying, guns, bullying, illegal drugs, teenage pregnancy) are likely to be [seen as higher priorities](#) both by the school and by the parents. Other solutions tried in [Australia](#) and the [USA](#) involve mailings to parents from the school or parent-child homework assignments; more in [background notes](#) to an earlier Findings analysis.

The UK context

Findings from the Swedish trials of the parenting programme were of doubtful relevance to the UK, where parents are much more accepting of underage drinking, and drink is more available and affordable. In drinking cultures like Britain, advice originating from the school about the parent's responsibility to communicate an unambiguous stance on drinking [risks being seen](#) as unwelcome meddling, especially by the heavy drinking parents whose children could most benefit from stronger parenting. However, the findings from this Dutch study suggest that in the UK as in the Netherlands, a suitably adjusted version of the parenting intervention would be a worthwhile *addition* to alcohol use prevention lessons, but not the standalone success it was in Sweden.

Attempts are being made in Britain to harden parental attitudes to youth drinking. Aided perhaps by [media coverage](#) highlighting the risks of youth drinking, the relevant [English national policy](#) under the previous government aimed to develop a national consensus on young people and drinking. At the sharp end of the policy are court orders requiring parents whose children persistently drink in public to exercise greater control. Further down the scale are support for parents whose children are at risk of problems such as drinking, and the attempt to establish a partnership with parents based on a clear understanding of acceptable and unacceptable levels and patterns of youth drinking. As assessed in 2008 however, the [message received by parents](#) from other aspects of alcohol policy – alcohol's mainstream position in society, and particularly the recent extension of opening hours – was that the government is not taking a stand to manage the issue of alcohol in society, undermining the credibility of calls for parents themselves to shoulder that responsibility.

For more on the Örebro programme and on its possible applicability to the UK see this Findings analysis of the [original Swedish trial](#) and this of the [later Swedish trial](#) which did not replicate the original's positive findings.

Thanks for their comments on this entry in draft to Ina Koning of Utrecht University in the Netherlands. Commentators bear no responsibility for the text including the interpretations and any remaining errors.

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