12.10 Computer simulations show children the 'consequences' of their actions

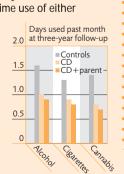
Findings In the USA pre-teens 'prevented themselves' from going on to drink (and smoke or use cannabis) through a series of computer simulations related to decisions over drinking. The findings open up a promising way to introduce substance use education and prevention in youth facilities without expert teaching staff.

514 primarily black or Hispanic youngsters aged 10-12 were recruited to the study at 43 sites including recreational and welfare facilities and after-school clubs. Sites were randomly assigned to a control group which received no special intervention, to a 10-session CD-ROM alcohol prevention programme, or to this plus parental components. The CD-ROM depicted characters from the same backgrounds as the youngsters in an "edgy urban landscape" probably familiar to many. Players decided how to react to different scenarios and then witnessed the consequences. They could choose again if these were negative until the 'right' course was taken. Parental components consisted of a video and newsletters explaining the project and attempting to engage parents in the preventive programme. Children and parents were offered two annual booster sessions. For the parents the first took the form of a group workshop and the second a new CD-ROM to work through with their sons or daughters.

Over 90% of the children completed all sessions and from 67% to 83%

of parents completed the parental components. Children were surveyed before the initial intervention, immediately afterwards, and

then annually for three years. At the end of this time use of either alcohol, tobacco or cannabis typically averaged about once a month, but in each case was significantly less frequent among youngsters who had been assigned to the CD-ROMS. The interventions had also led the children's families to become more involved in monitoring and controlling drinking (especially when parental components were included) and had improved the children's confidence in their abilities to resist offers of drink or drugs.



- In context Though the follow-up rate was excellent, how typical the children were of all those who attended the 43 sites is not known. Both children and parents had to agree to enter the study, raising the possibility that this self-selected set of families might react differently to other families. However, in normal practice in such settings, children would also have been free to choose whether to use the CD-ROM. The impacts on cannabis use and cigarette smoking despite the focus on alcohol suggest that the interventions may have fostered across-the-board decision-making skills or perhaps that in this sample of children, use of all three substances tended to go together. At least one similar CD-ROM has been made available in Britain as part of the Scotland Against Drugs campaign (Billy and the Big D-cision www.information-plus.co.uk). It has been positively reviewed but not formally evaluated.
- Practice implications The approach tested in the study is suitable for settings which young people repeatedly and frequently visit including after-school clubs and youth clubs. It could also be used in schools in or out of lessons. Perhaps the key question is whether such interventions will get used only by a few children who don't really need them (this could explain why use levels were guite low in the study) or by the bulk of young attenders, especially since much more is required than an initial 'see-what-it's like' trial. While the CD-ROM itself needs no skilled adult input, engineering the social dynamic so that it is widely used and so that parents also reinforce its messages may take considerable skill and persistence. Facilitators might, for example, have to transform a situation where a child would feel the odd one out for spending time on an alcohol prevention game to one where they would feel left out if they didn't.

With sufficient demand, the CD-ROM used for the study may be made commercially available. Its 'one right answer' approach may not appeal in Britain, but the simulation technique is promising.

Featured studies Schinke S.P. et al. "Reducing the risks of alcohol use among urban youth: three-year effects of a computer-based intervention with and without parent involvement." Journal of Studies on Alcohol: 2004, 65(4), p. 443-449. AC

Contacts Steven Schinke, School of Social Work, Columbia University, 1255 Amsterdam Avenue, New York 10027, USA, schinke@columbia.edu.

Thanks to Richard Ives of educari for his comments.