CAN A NEW FORM OF INHIBITORY TRAINING REDUCE HEAVY DRINKING?

JL Smith[1], N Dash[2], SJ Johnstone[2], K Houben[3], M Field[4,5]

1. University of New South Wales, Sydney, Australia
2. University of Wollongong, Wollongong, Australia
3. Maastricht University, Maastricht, The Netherlands
4. University of Liverpool, Liverpool, United Kingdom
5. UK Centre for Tobacco and Alcohol Studies, Liverpool, United Kingdom

Introduction and Aims: Deficits in behavioural inhibition are apparent in users of many substances, including alcohol dependent groups as well as heavy drinkers. Previous research has shown that brief training to improve inhibitory control reduces alcohol consumption. We investigated whether a new form of inhibitory training would produce greater reductions, relative to a carefully designed control condition and relative to proven methods of reducing consumption.

Methods: 114 regular drinkers were assigned randomly to one of five training conditions: Control (no inhibitory training, but also no alcohol promotion); Beer-NoGo (inhibit responses linked to task-irrelevant pictures of beer); Simple-stop (requiring more urgent inhibition but without pictures of beer); Combined (a previously untested form of inhibitory training requiring urgent inhibition to pictures of beer); or Brief Alcohol Intervention (BAI). The primary outcome measure was alcohol consumption in the week after compared to the week before training.

Results: All groups reduced their drinking after training (total drinks/week, beer drinks/week, binge episodes/week, maximum drinks/day, and average drinks/drinking day), however, only the BAI group showed a significantly greater reduction relative to Controls. This was especially so for participants with AUDIT score ≥ 12.

Discussion and Conclusions: The design of the Control task is critical to the results observed. Previous research may have reported significant reductions in their training tasks only because their control conditions promoted alcohol consumption. Future research needs to establish a training protocol that produces greater reductions in consumption not only relative to a well-designed control condition but also relative to a BAI.