

## The impact of ecstasy upon prospective memory and related central executive processes

Thomas Heffernan  
Northumbria University, UK

Chronic use of ecstasy has been shown to impair a range of memory processes, including producing deficits in executive function (EF: controlling attention and multitasking) and prospective memory (PM: memory for future events). The current study extends our understanding of this area by exploring whether both EF and PM deficits co-exist in the same cohort of ecstasy users when compared with a non-user control group and, if so, what the relationship between these deficits might be. An existing-groups design was utilized, comparing ecstasy users with a non-user group as the independent factor. Scores on the Cambridge Prospective Memory Test (CAMPROMPT: an objective measure of time- and event- based PM) constituted the PM dependent measure and scores on the Reverse Digit Span task (RDS: an objective CE task) constituted the CE dependent measure. Age, mood, and other drug use (alcohol, smoking and cannabis) were also measured using the Hospital Anxiety and Depression (mood) Scale and a drug use questionnaire. All testing was carried out individually and under controlled laboratory conditions. After observing no between-group differences on age, mood, and other drug use, ecstasy users performed significantly worse on the CAMPROMPT and RDS than did the non-users. After controlling for RDS scores, the difference between users and non-users on CAMPROMPT disappeared. The finding that ecstasy users showed reduced performance on the CAMPROMPT after controlling for CE performance suggests strongly that objective PM performance is underpinned by CE functions, suggesting CE deficits may be at the heart of ecstasy-related PM deficits.

### Biography

Tom Heffernan completed his PhD in 1991 from Manchester University in England. He is currently Senior Lecturer and leads the Collaboration for Drug and Alcohol Research network at Northumbria University. He has published more than 40 papers in reputed journals and serving on the international editorial board of two peer-reviewed journals.

tom.heffernan@northumbria.ac.uk

## Buprenorphine maintenance treatment for opioid dependence with contracted no abuse of other drugs and work/study of patients treated 2004 to 2011

W Leif Ohlin  
St. Lars Psychiatric Hospital, Sweden

**Background:** Continuous abstinence and retention in treatment for alcohol and drug use disorders are central challenges for the treatment providers. Predictors and treatment structure may differ across treatment modalities. In this study, the structure was reinforced by the addition of supervised urine samples three times a week and mandatory daily work/study education activities as a prerequisite of inclusion in the program.

**Methods:** Of 128 patients consecutively admitted to buprenorphine maintenance treatment five patients dropped out within the first week. Of the remaining 123 demographic data and psychiatric assessment were used to predict involuntary discharge from treatment and corresponding cumulative abstinence probability. All subjects were administered for DSM-IV, SCL-90, AUDIT, SSP and SOC, all self-report measures.

**Results:** In the current study, 123 patients followed over 7 years. After 6 months was 86/123 (70%) remained in treatment and of work/study no abuse of other drugs. Included those patients who readmitted after suspension is at 7 years 70/123 (57%) remained in Buprenorphine maintenance treatment, continuous abstinence and work/study.

**Conclusion:** Buprenorphine maintenance treatment with daily work/study and no abuse of other drugs shows a high retention and abstinence. Negative predictor of retention and abstinence was poly-substance, conduct disorder and younger age at baseline.

### Biography

Leif Ohlin has completed his Master of Science in Social Work in 2006 from Malmö university. He works as a clinician and researcher at St. Lars psychiatric hospital in Southern, Lund, Sweden. He has published 1 paper in reputed journal.

leif.ohlin@skane.se