Abstract

Objective: the aim of the study is the investigation of the relationship between impulsiveness and processing of context information in a sample of drug abusers.

Method: 38 outpatients with substance dependence have been evaluated with the Barratt Impulsiveness Scale 11 (BIS-11), as measure of impulsiveness, and the Temperament and Character Inventory (TCI-125) for the evaluation of personality traits. A modified version of Continuous Performance Test (CPT) for the neurocognitive evaluation of process context information has been used. Clinical sample scores have been compared with those of control samples.

Results: the drug abuser sample shows higher levels of impulsiveness at the BIS-11, A-Y false alarms and lower A’ at CPT than controls. No significant correlation between BIS-11 and CPT scores has been found. The BIS-11 scores correlate with TCI Novelty seeking (NS) and its subscales NS2 (impulsiveness), NS4 (disorderliness).

Conclusions: our sample shows higher impulsiveness than the control group, planning deficit derived from a temperament characterised by novelty seeking, with a low capacity to inhibit habitual behaviours. The neurocognitive variables indicate a decrease of behavioural inhibition characterising this population as impulsive but no evidence of a correlation between the two models was found.

Keywords: Impulsiveness, Substance abuse, Processing of context information, Barratt Impulsiveness Scale (BIS-11), Temperament and Character Inventory (TCI-125), A-X Continuous Performance Test (A-X CPT)