The Go/No Go Contingent Negative Variation (CNV): Relationships with alcohol abuse and criminal recidivism

ABSTRACT:

Background
The Go/NoGo CNV is a biomarker of emotional impulsiveness, hypothetically resulting from a history of early-onset alcohol abuse (EOAA). Go/NoGo CNV has previously been shown to reliably predict violent reoffending in patients discharged from high-secure care into the community.

Aim of the study
This study aimed to test the following predictions arising from a hypothesis regarding the role of early-onset alcohol abuse in the genesis of adult antisocial personality (Howard, 2006):
1. EOAA will be shown to mediate the transition from childhood conduct disorder (CD) to adult antisocial personality;
2. Emotional impulsiveness will be demonstrated as a core feature of severe personality disorder (PD);
3. Severe PD will be shown to be associated with a history of severe violence;
4. Reoffending in PD patients released from secure care into the community will be shown to be associated with a toxic triad: severe alcohol abuse, severe CD, and comorbid borderline PD.
5. Through the use of biofeedback it will be demonstrated that it is possible to train the brain of emotionally impulsive offenders so that their Go/NoGo CNV is normalized in a non-impulsive direction.

Method
These predictions were tested in a series of studies which examined offenders with PD (see publications below).

Results and Conclusions:
The above predictions were confirmed. These results suggest that a developmental pathway important in the genesis of adult violence (and associated severe PD) runs from childhood CD (and its precursors) to EOAA and hence, via impairment in the brain substrate of cognitive control, to severe PD and violence in adulthood.

Keywords
Alcohol abuse, Personality disorder, Violence, Impulsiveness
Published Work:


