

# PROJECT "TRANS NEURO": NEUROPSYCHOLOGICAL PERFORMANCE IN DECISION-MAKING OF PATIENTS WITH DRUG RELATED DISORDERS IN TREATMENT IN A THERAPEUTIC COMMUNITY / DAY UNITY



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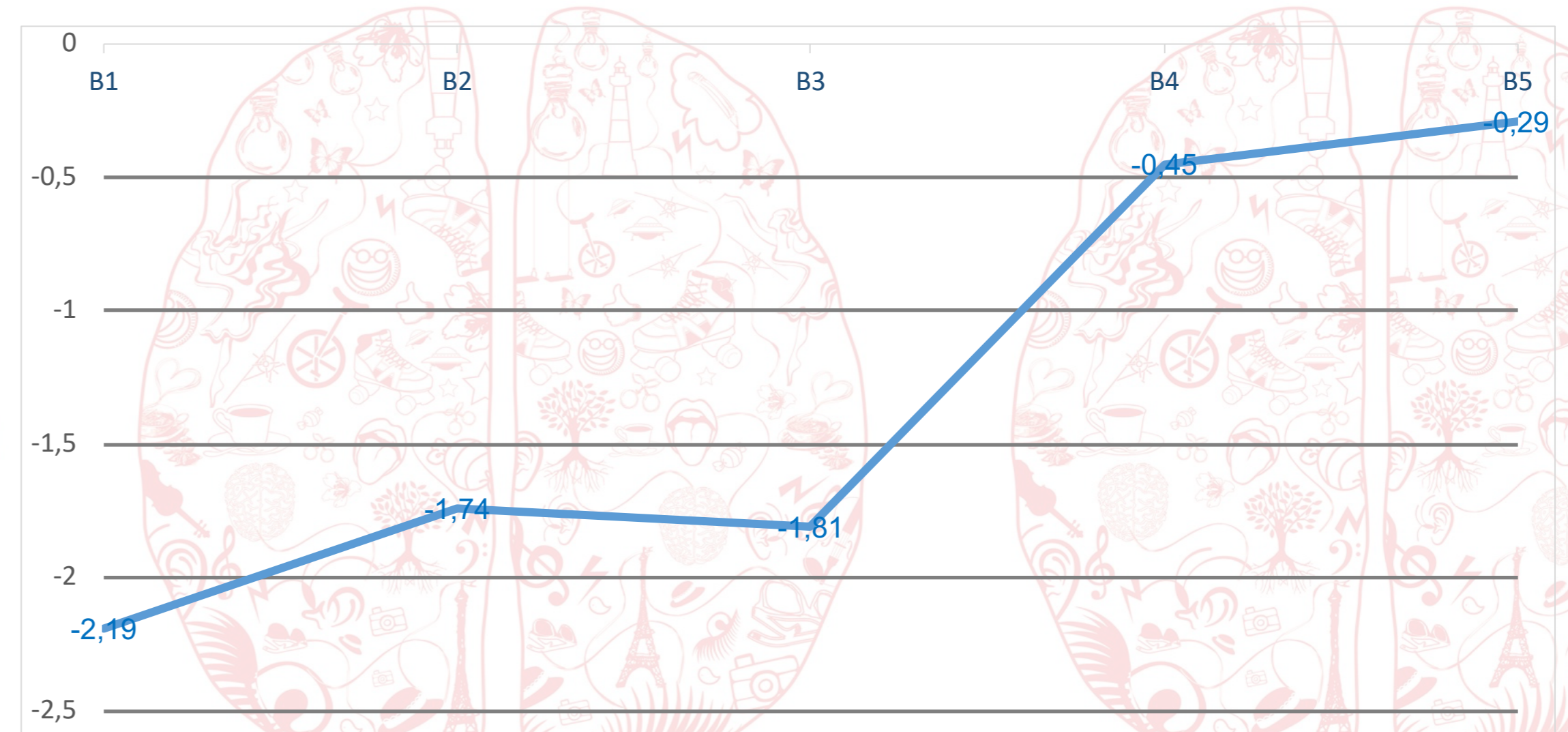
**Introduction:** Decision making is a process guided by emotional signals or somatic markers (1) that anticipate the prospective consequences of different decision options. According to the somatic marker hypothesis, the inability to elicit or process these emotional signals would produce a "myopia for the future," that is, an inability to anticipate the possible positive or negative consequences of certain courses of action (1). Several studies examining the performance of drug-dependent patients with the Iowa Gambling Task (IGT) have demonstrated significant changes in the decision-making processes of these patients (2).

**Aim:** Study the performance in a neuropsychological decision-making task in a number of patients using psychoactive substances, in abstinence, in a sample of patients being treated in a Therapeutic Community and Day Unity.

**Method:** A computerized version of the Iowa Gambling Task was administered to an intentional sample of patients (N = 31) under treatment at DICAD / ARS North care units: Therapeutic Community and Day Unit of Ponte da Pedra (CT / UD), who fulfill the selection criteria. This preliminary study is part of a project approved by the Ethics Committee for Health of ARS North on October 3, 2017 (Legal Opinion Nº128 / 2017) and make part of a cross-border research with Galiza, Spain.

## Results:

Iowa Gambling Test (IGT)	N=31
Bloco 1	-2,19(4,85)
Bloco 2	-1,74(4,97)
Bloco 3	-1,81(4,77)
Bloco 4	-0,45(7,44)
Bloco 5	-0,29(7,18)
IGT Total	-6,26(23,33)



**Conclusions:** The results obtained in the exploration carried out, indicate that a large proportion of the patients studied present neuropsychological changes in decision-making and this results are consistent with previous investigations (2). These changes have implications in different aspects of the functionality of these individuals, resulting in family and social deficits relationships and the difficulty of professional re(in)corporation of these individuals. Functionality at the clinical level is also compromised, reflected in the lower participation and implication in the treatment, potentiating the relapses and / or the dropout rate of the treatment programs. Identifying neurocognitive changes will enable individuals with cognitive impairment to attend specific cognitive rehabilitation programs.

## References:

1. Bechara, A & Damasio H (2002). Decision-making and addiction (part I): impaired activation of somatic states in substance dependent individuals when pondering decisions with negative future consequences. *Neuropsychologia* 40: 1675-89.
2. Verdejo, A., Aguilar de Arcos, F & Pérez-García, M (2004). Alteraciones de los procesos de toma de decisiones vinculados al córtex prefrontal ventromedial en pacientes drogodependientes. *Rev Neurol* 38 (7):601-6.