IMPAIRED DECISION-MAKING IN THE 3 PHASES OF BIPOLAR DISORDER: A TRAIT-RELATED DEFICIT


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Introduction: Bipolar disorder (BD) is associated with impaired psychosocial behaviours. Little is known about deficits in neurocognitive functions like decision-making possibly related both to these behaviours and to the nature of the disorder.

Objectives: To determine whether decision-making impairments exist in manic (M), depressed (D) and euthymic (E) bipolar patients (BP) and to determine whether illness and course-of-illness characteristics can predict participants’ performance

Methods: A power analysis was conducted. A total of 315 subjects, including 45 M and 32 D inpatients and 90 E outpatients with BD I, medicated, and 150 Healthy Controls (HC), age, IQ and gender-matched, were included. Decision-making ability and sensitivity to punishment frequency were assessed with the Iowa Gambling Task (IGT).

Results: On the IGT, MBP (p< 0.001), DBP (p< 0.01) and EBP (p< 0.05) selected significantly more cards from the risky decks than HC with no significant differences between BP groups. Unlike HC, MBP (p< 0.001), DBP (p< 0.05) and EBP (p< 0.05) showed little capacity to learn from incurred losses with no significant differences between BP groups, but, like HC, BP preferred decks that yielded infrequent penalties over those decks that yielded frequent penalties. In a multivariate analysis, decision-making impairment in the BP was significantly (p=0.001) predicted by low level of education, high total number of admissions and family history of BD.

Conclusions: BP clearly show defects in decision-making predicted by course-of-illness illness characteristics. Impaired decision-making might be a trait-related neurocognitive deficit in BD and partly explain impaired psychosocial behaviours of BP.