

# Influence of fluctuations of decision-making and impulsivity on the link between craving and use : an everyday life study

Louise Jakubiec<sup>1,2</sup>, Manon Chevalier<sup>1,2</sup>, Fuschia Serre<sup>1,2</sup>, Melina Fatseas<sup>1,2</sup>, Maud Dupuy<sup>3</sup>, Joel Swendsen<sup>3</sup>, Marc Auriacombe<sup>1,2</sup>

<sup>1</sup>Addiction Research, CNRS USR 3413 SANPSY, University of Bordeaux, France, <sup>2</sup>Addiction Clinic, CH Ch. Perrens and CHU Bordeaux, France, <sup>3</sup>Institut de Neurosciences cognitives et intégratives d'Aquitaine CNRS UMR 5287 – INCIA, Université de Bordeaux, France



## INTRODUCTION

A high level of impulsivity is well known among individuals with addiction vulnerabilities.

**Craving** is predictive of **use** and **relapse** in patients with use disorder.

## OBJECTIVES

To determine in what extent **impulsivity fluctuations** would influence the link between **craving** and **substance use** among patients with use disorders.

### Study Design

7 days, Transversal, Observational  
5 random evaluations per day

## METHODS

### Population

Over 18 and seeking treatment for substance use (alcohol, tobacco, cannabis) in outpatient center.

### Ecological Momentary Assessment (EMA) Method



Evaluation in daily life  
Real time data  
Repeated measures in the day

### Interested Variables

#### Baseline measures

BIS-11 (Barratt Impulsiveness Scale-11) SCORES (non-planning, motor, attentional impulsivity)

#### EMA measures

Craving level (1-7)  
Impulsivity level\* (1-7)  
Main problematic substance use (Yes-No)

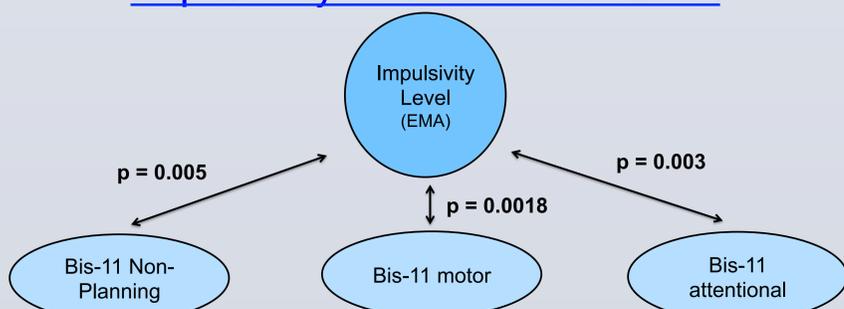
\*« Since the last questionnaire, in what extent have you been doing things without thinking? »

### Data Analysis Strategy – HLM (Hierarchical Linear Model)

Prospective links between impulsivity, craving and substance use at the next evaluation



### Convergent Validity between BIS-11 and Impulsivity collected with EMA



## RESULTS

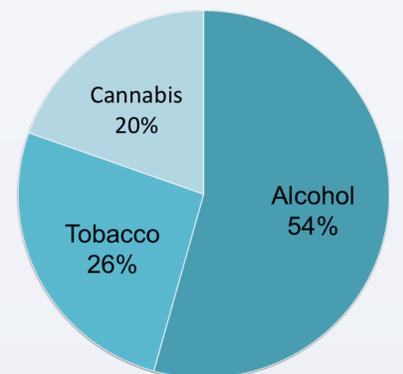
### Sample Characteristics

N = 46, 43 y.o., 52% males

Mood Disorder : 20%

Polyaddiction : 44%

### Main Problematic Substance



### Daily Life Evaluations Results

Response rate : 91% (1459 questionnaires)

### 1 – Association between impulsivity and craving:

Figure 1 – Association between BIS-11 scores and craving collected with EMA:

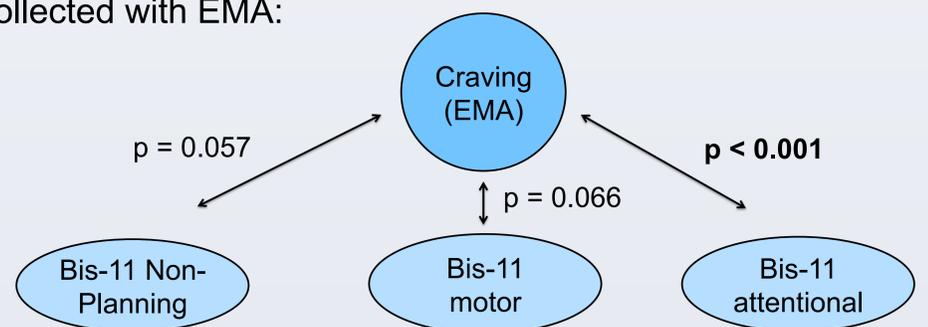
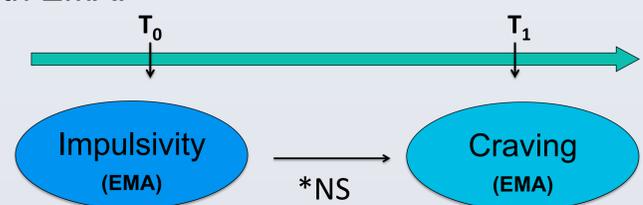
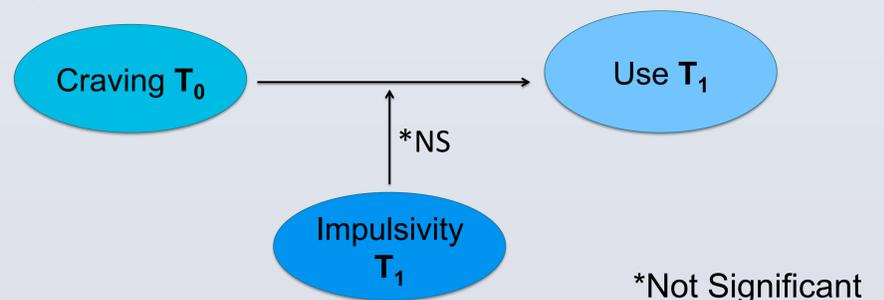


Figure 2 – Association between impulsivity and craving collected with EMA:



### 2 – Impact of impulsivity on the link between craving and use collected with EMA:



## CONCLUSIONS

Our results suggest that **impulsivity was associated with higher craving levels** reported in daily life among patients beginning treatment for addiction.

Characterization of the link between craving and impulsivity may lead to innovative methods in addiction treatment.

Contacts : louise-adelaide.jakubiec@u-bordeaux.fr,

marc.auriacombe@u-bordeaux.fr, manon.chevalier@u-bordeaux.fr

Financial Support : ANR 2006

