

Titre: Ecological Momentary Assessment to study Craving and its dynamics as predictors of stimulants use

Thématique : Digital & Addiction

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Résumé

Background. Ecological Momentary Assessment (EMA) studies previously demonstrated a prospective association between increase in craving intensity and higher probability of substance use in the following hours for alcohol, tobacco, cannabis and opiates, highlighting the major role of craving in relapse. To date, only few studies have explored this link for stimulants. Based on the literature on affect dynamics, recent methods make it possible to explore the influence of the characteristics of craving dynamics in subsequent substance use.

Aim. Examine the link between craving intensity and its dynamics in daily life and stimulants use reported in the following hours, or the day after.

Methods. A two-week EMA protocol assessed stimulants craving and use four times per day among participants with Stimulant Use Disorder, recruited at treatment intake in outpatient addiction treatment centers, or among people attending Harm Reduction Settings in Bordeaux and Bayonne, France. Within day craving dynamics were assessed by *variability*, defined as the within-person standard deviation (SD), and *instability*, the root mean squared successive

difference (RMSSD) of the craving intensity. Data were analyzed using Hierarchical Linear and non-linear Modeling (HLM).

Results. Among the current 27 participants, analyses revealed that craving intensity predicted stimulant use at the next assessment 4 hours later ($\gamma = 0.236$, $p = 0.037$). Higher variability and instability of craving on a given day was associated with next-day stimulant use ($\gamma = 0.050$, $p = 0.034$ and $\gamma = 0.033$, $p = 0.007$ respectively), after controlling for stimulant use and average craving intensity on the same day.

Conclusion. These results document the importance of craving as a predictor of stimulants use. These findings also suggest that, beyond average craving, the extent to which craving fluctuates (dynamic parameters) is important in predicting subsequent use. Therefore, craving could be a useful indicator of relapse, and may be considered a potential target for Stimulant Use Disorder treatment.

Liens d'intérêt : aucun

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