

# **Faculty of Psychology and Neuroscience**

Project title: Painfully bored. The role of arousal and boredom in non-suicidal self-injurious behaviour

Project leader: Chantal Nederkoorn, PhD

Function: Associate Professor

Collaborators: Prof. Johan Vlaeyen, PhD & Linda Vancleef, PhD

## Proposal (250 words):

### Introduction:

Non-suicidal self-injury (NSSI) is newly introduced in the DSM-5 as a disorder in need for further study. NSSI behaviors are alarmingly frequent in the general population with prevalence rates between 13% and 45%. However, the rates rise to 50% in clinical samples, where NSSI behaviors are present in a broad range of different disorders, including personality disorders, mood disorders, and eating disorders. The dominant explanatory models for the etiology of NSSI postulate that the main function of self-injury is the avoidance of high arousal negative emotions, such as anger. However, recent studies in our lab suggested that NSSI can also be triggered by boredom, characterized by low arousal and lack of external stimulation.

### **Hypothesis and Objectives:**

The contribution of two distinct routes on triggering NSSI will be tested: 1. Negative high arousal emotions and 2. Boredom, characterized by low arousal and lack of stimulation. Both the independent and mutual influence of these routes on NSSI will be examined in the project.

### **Setting and Methods:**

We will test the causal role of boredom on NSSI in three lab studies, both in healthy subjects and NSSI patients. In addition, the role of boredom will be tested in a real-life examination of a sample of NSSI patients, using real-time ecological assessment (EMA).

# Impact:

The results of the project will be relevant for the treatment and prevention of self-injurious behavior in patients and non-clinical populations and for facilities in which people experience lack of stimulation for prolonged periods (i.e. hospitals, clinics, prisons).

**Requirements candidate**: Highly motivated student with good English communication skills and proactive and resolute attitude.

**Keywords**: Clinical psychology, mental health, non-suicidal self-injury, pain, experimental psychopathology, boredom, arousal.

### Top 5 selected publications:

- 1. Nederkoorn, C., Vancleef, L., Wilkenhoner, A., Claes, L., & Havermans, R.C. (2016). Self-inflicted pain out of boredom. *Psychiatry Research*, *237*, 127-132.
- 2. Havermans, R. C., Vancleef, L., Kalamatianos, A., & Nederkoorn, C. (2015). Eating and inflicting pain out of boredom. *Appetite*, *85*, 52-57.
- 3. **Vlaeyen, J.W.,** Morley, S., Crombez, G. (2016). The experimental analysis of the interruptive, interfering, and identity-distorting effects of chronic pain. *Behav Res Ther, 86,* 23-34.
- 4. Karsdorp, P.A., Geenen, R., **Vlaeyen, J.W.** (2014), Response inhibition predicts painful task duration and performance in healthy individuals performing a cold pressor task in a motivational context. *European Journal of Pain, 18,* 92-100.
- 5. **Vlaeyen, J.W.**, & Linton, S.J. (2012). Fear-avoidance model of chronic musculoskeletal pain: 12 years on. *Pain, 153,* 144-147.