

Project 1.1 Treating procrastination - effectiveness and neurobehavioral mechanisms of Cognitive-Behavioral Therapy and Working Time Restriction.

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www: <https://lobi.nencki.gov.pl/>

Background:

Procrastination is a fairly common disorder in which people postpone certain tasks, despite knowing that such a behavior may lead to negative consequences including poor performance, discomfort and even lower quality of life. The negative effects of procrastination are felt not only on a personal level, but also on the socio-economic level (e.g. as a result of late payment of taxes) and in healthcare systems (e.g. as a result of postponing doctor's appointments and seeking treatment). Scientists estimate that procrastination affects 15-20% of the entire population, and 50% (or even 80-95%) of students. Despite the prevalence of procrastination, there is a lack of therapeutic programs to reduce procrastination, as well as research on the effectiveness and mechanisms of such interventions. In this project, we intend to compare the neuronal and psychological mechanisms of action and the effectiveness of two short-term procrastination therapy programs based on the assumptions of cognitive behavioral psychotherapy. They are designed to help change dysfunctional thoughts, feelings, and behaviors that lead to procrastination. Both programs consist of five 1.5-hour sessions in groups of 5 to 7 patients led by two therapists and contain similar elements of psychoeducation and require participants to introduce and monitor new behaviors. However, these programs differ in the type of behavior that they implement. One of them focuses on monitoring behaviors related to an effective work schedule and timely beginning of work, as well as on ensuring an appropriate work environment. The second program does not introduce these elements, but is mainly based on the implementation and monitoring of the paradoxical principle of reducing working time, and its gradual increase, provided that the earlier, short, windows are effectively used when work is allowed. In this project, we will compare the effectiveness of these programs in reducing procrastination and other related mental problems (e.g., depression or anxiety). In our research, we also intend to investigate the psychological and neural mechanisms of changes resulting from the above-described therapeutic programs. On the psychological level we will use a number of questionnaires, but we will also use functional magnetic resonance and electroencephalography to assess neuronal changes. The results obtained during the project will undoubtedly contribute to obtaining important information in the field of research on the mechanisms and effectiveness of procrastination psychotherapy. We hope that this will allow us to improve the ways of dealing with this civilization problem.

Aim:

The aim of the project is to evaluate the effectiveness, stability of effects and mechanisms (at the cognitive, emotional, behavioral and neural levels) of two promising brief psychotherapeutic interventions in a sample of highly procrastinating students.

Requirements:

- Master's degree in psychology, cognitive science, physics (neuroinformatics), biology (neurobiology), or related studies,
- high motivation for scientific work and interest in the subject of the project,
- fluent English and Polish, spoken and written,
- knowledge of basic statistical methods and programs (e.g. SPSS, R),

- ability to cooperate in an interdisciplinary research team,
- good work organization,
- full-time availability for the duration of the entire project (October 2022 - September 2026).

Additional advantages will be:

- documented participation in research projects,
- experience in research using neuroimaging methods,
- programming skills in Matlab, Python or similar,
- knowledge of programs used in psychological experimental studies (e.g. Presentation, Psychopy),
- thesis subject related to neuroscience, psychology of emotions or related topics,
- high average grade from the course of studies.