

# Research Project

Feasibility and effects of a transdiagnostic physical activity counseling program in adolescent psychiatric patients

## Project funded by own resources

**Project title** Feasibility and effects of a transdiagnostic physical activity counseling program in adolescent psychiatric patients

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Organisation / Research unit

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Project start 01.07.2022

Probable end 30.06.2023

Status Completed

#### **Background**

Mental health disorders are the leading cause of disability and illness in adolescents worldwide. Given the developmental time course of the most prevalent psychiatric disorders, the contribution of sleep disturbances during adolescence may be particularly important as a point for intervention. One such intervention may be physical activity promoting counselling. However, most of the current knowledge of physical activity interventions in psychiatric settings is based on adult patients with major depressive disorder.

#### Objectives and aims

The objective of this study is to pilot-test the feasibility and the efficiency of a randomized-controlled intervention trial comparing physical activity promoting counselling (PAC) against treatment as usual (TAU) on sleep, psychopathology, and cognitive performance among a transdiagnostic sample of adolescent psychiatric out-patients.

### **Methods**

The proposed study will recruit a total of 40 psychiatric outpatients from local Child- and Adolescent Psychiatric hospitals around Basel, aged 12-17 years, who are willing to take part in the study. Further inclusion criteria are presence of sleep/circadian problems in addition to at least one diagnosis according to DSM-5. Exclusion criteria involve organic sleep- and brain disorders, as well as changes to medication regime during the study protocol. Adolescents will be serially randomized over a period of 5 months into one of two intervention arms: (a) PAC + TAU; and (b) TAU. The intervention will be delivered in 6 sessions over 12 weeks. Data will be collected at two time points: Baseline and post-intervention. Sleep and physical activity measures will be assessed both subjectively and objectively. Biological markers include heart rate variability, cardiorespiratory fitness, and sleep neurophysiology.ă

#### **Expected impact**

By increasing habitual physical activity levels among psychiatric adolescents, as well as using exercise to stabilize circadian rhythm, PAC has the potential to positively impact on sleep health. Moreover, improvements in sleep can exert beneficial effects on cognitive, affective, and behavioral functioning, and thus improve clinical and psychosocial outcomes. This project provides the first step of a larger clinical RCT, in which a transdiagnostic sleep and circadian intervention combined with PAC is tested against sleep therapy alone and TAU among a transdiagnostic sample of adolescent psychiatric outpatients.

**Keywords** Physical activity promotion, youth, sleep health, circadian rhythm disorder, adjunct therapy **Financed by** 

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Add publication

Add documents

Specify cooperation partners