



KAMBEITZ LAB

Prediction and Prevention in
Mental Health

PhD- & MASTER-THESIS PROJECT

“Speech- & Language-analysis in Psychotic and Affective Disorders”

Background:

Psychotic disorders remain one of the main factors of global disease burden. Recent advances in the early identification of patients at-risk for psychosis, could potentially allow for interventions that alleviate the disease course. At the same time, the rapid developments of analysis techniques for language and speech data and artificial intelligence (A.I.) have paved the way for promising applications in psychiatry.

In the current project we aim to analyse existing data from multiple cohorts of patients with psychosis, patients at-risk for psychosis and healthy individuals to identify early markers of psychosis. We will leverage tools from language analysis, speech data and artificial intelligence. The aim is to develop markers that characterise individual patients, track the progress of symptoms and allow precise prediction of clinically relevant outcomes. Moreover, these analyses will be complemented by extracting information from existing large-language models.

Supervision:

The Lab for Prediction and Prevention in Mental Health (<https://www.kambeitzlab.com/>) is an interdisciplinary group of researchers at the Department of Psychiatry and Psychotherapy at the University Hospital Cologne.

Requirements:

- Background in psychology, medicine, computer science or related disciplines.
- Experience in using programming/coding for data analysis (e.g. R, Python, Matlab)
- Previous experience in the area of psychiatry/mental health is a plus but not a requirement.

Duration: 6 months

Starting date: August/September 2023

In case of interest or for more information please contact:
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