

Artificial Intelligence in Psychopathology Assessment: From Screening to Intake to Follow-Up

Participants:

Roman Kotov (Chair), Camilo Ruggero (Presenter), Roman Kotov (Presenter), Jenna Reinen (Presenter)

Symposium Synopsis:

Digital data are abundant in clinical practice, including audio and video streams (e.g., telehealth visits), phone sensors, and increasingly wearables. AI models offer to make these data useful for psychopathology assessment to guide clinical decision-making, including questions of detection, diagnosis, and monitoring. However, strengths and limitations of available models for these tasks and modalities are insufficiently understood. The symposium addresses these gaps with multimodal data from large clinical samples. First, Dr. Ruggero will examine validity of digital screening for PTSD in primary care, using video-recorded intakes and FitBit data. He will focus on actionable statistics such as positive and negative predictive value. Dr. Kotov will present on utility of leading AI models for diagnostics, using video recordings of clinical interviews. His talk examines a wide range of psychopathology constructs, many not studied previously with audio/video models. Dr. Reinen will present on insights that can be gained from patient's language, using narratives from the landmark AMP SCZ study. Importantly, she also examines the utility of these linguistic markers for tracking clinical changes over 12 months. Audience members will learn to apply these methods in their own research for a wide range of disorders and clinical questions.