Stanford

Mirko Uljarevic

Affiliate, Psychiatry and Behavioral Sciences - Child & Adolescent Psychiatry and Child Development

Bio

BIO

I am a medically trained researcher focused academic with a background in developmental psychopathology, psychometrics and big data science. My research takes a life-span perspective and is driven by the urgent need to improve outcomes for people with autism and other neuropsychiatric (NPD) disorders and neurodevelopmental conditions (NDD). My primary research interest has focused on combining cutting-edge psychometric procedures and a big data approach to better understand structure of clinical phenotypes across autism and other NPD and NDD and on using this knowledge to improve existing and develop new clinical assessments that are more effective for screening and diagnosis, tracking the natural and treatment-related symptom progression and for use in genetic and neurobiological studies. In addition to my focus on the development of outcome measures, I have collaborated with leading psychopathology researchers and groups in the United States, Europe and Australia on numerous projects spanning a range of topics including genetics, treatment and employment, with a particular focus on understanding risk and resilience factors underpinning poor mental health outcomes in adolescents and adults. Most recently, through several competitively funded projects, I have led the statistical analyses to uncover the latent structure of social and communication and restricted and repetitive behaviors (RRB) clinical phenotypes across NPD and NDD. These findings have enabled us to (i) start capturing and characterizing a highly variable social functioning phenotype across a range of disorders and understanding mechanisms underpinning this variability, (ii) combine phenotypic and genetic units of analyses to advance our understanding of the genetic architecture of RRB, and (iii) focus on identification and characterization of subgroups of individuals that share distinct symptom profiles and demonstrate clinical utility and neurobiological validity. Importantly, this work has provided key information for developing a programmatic line of research aimed at developing novel, comprehensive assessment protocols that combine parent and clinician reports, objective functioning indicators and incorporate state-of-the-art psychometric, mobile and connected technologies and procedures.

I am a co-director of the recently established Program for Psychometrics and Measurement-Based Care (https://med.stanford.edu/sppmc.html) that aims to bring together world-leading expertise in clinical science, psychometrics, and big data analytics to bridge the gap between the science of measurement development and clinical practice and bring improvements to both clinical care and research.

INSTITUTE AFFILIATIONS

- Member, Wu Tsai Human Performance Alliance
- Member, Maternal & Child Health Research Institute (MCHRI)