

Brain Profiler App

Translational Personalized Psychiatry

Abstract

Translating psychiatric clinical phenomenology into brain disturbances is at the heart of discovering the causes of mental disorders. "Brain Profiler Application" makes personalized testable-prediction about the brain disturbance of your patient. The application is up-to date with the neuroscience of computational psychiatry as it is summarized in the scientific literature about "Clinical Brain Profiling" and "Neuroanalysis"⁽¹⁻⁵⁾

According to clinical brain profiling, symptom-free individuals have optimal brains in terms of 1) Connectivity, brain hierarchy organization, 2) plasticity and adaptability, and 3) resting-state network configurations. The symptoms of psychiatric illness occur when one or more of these brain organizations "de-optimize" or "breakdown."

With the brain Profiler app' you can easily rate the signs and symptoms of your patient using currently common assessment, and immediately receive a full description of the brain-circuitry disturbance of that patient. The app' outputs a detailed testable prediction of the connectivity hierarchy plasticity and resting-state disturbances that your patient is possibly suffering from.

Thus Brain Profiler App' firstly reconceptualize mental disorders as brain disorders which can be validated with functional brain-imaging (preferably EEG). It also serves multiple additional functions as a clinical decision-support system, and finally it is a platform that gives meaningful neuroscientific significance to the recently developing technologies of wearable and mobile sensors in digital mental-health.

The Brain Profiler App' is designed to revolutionize the way psychiatry psychology and higher-functions neurology will be practiced, and requires your professional clinical contribution (inputs) to develop it to full capacity.

In this talk we shall download the App', use it, explain the science behind it, and discuss your recommendations, criticisms and inputs.

References

1. Peled A. *Brain dynamics and mental disorders, a project for a scientific psychiatry*. Yozmot Heiliger 2004.
2. Peled A, Brand D. *Optimizers 2050*. Saga Books 2005.
3. Peled A. *NeuroAnalysis, Bridging the gap between neuroscience psychoanalysis and psychiatry*: Psychology Press; Routledge; July 2008 Europe, September 2008 USA.
4. Peled A. *Brain "Globalopathies" cause mental disorders*. *Med Hypotheses* 2013 Dec;81(6):1046-55
5. Peled A, Geva A. *Clinical brain profiling: a neuroscientific diagnostic approach for mental disorders*. *Med Hypotheses* 2014 Aug 8. pii: S0306-9877.

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More than 20 years clinician and chair of department. Academic position at the Technion (Israel Institute of Technology). Field of research, complex-system-neuroscience and Computational Psychiatry, on which this application is developed.