FAQ PAR

What is the PAR?

PAR stands for Predictive Analytics Report and uses machine learning analytics that compares over 30,000 individual data points in the brain. It looks at DSM scales from the MCMI-III test and compares that to different functions of the brain that were collected during the NeuroCodex® Evaluation. The PAR looks at specific issues such as anxiety and depression, mood disorders, bi-polar, thought disorders, addictions, PTSD, etc. We take those data points and compare that to a pattern recognition algorithm in order to predict how the brain *is* functioning compared to how it *should be* functioning and in addition, how the individual thinks/feels they are functioning.

The PAR can also indicate pre-dispositions to certain issues, based on brain function and brain organization. So, the PAR helps the therapist target more directly the type of treatment they may want to provide their client.

How does PAR help the Therapist?

The PAR was developed as a tool that would help the therapist (and client) understand the brain-based issues they are experiencing. We work with the results of both the EEG brain wave activity during tasks as well as psychometric scores during the psychometric testing. From that data, the PAR analytics makes a prediction based on the current brain organization and produces a scale of whether we should see no issues - to maybe an issue - to the odds are pretty good there will be an issue within a category, such as depression, addiction, PTSD, etc.

We also collect data through assessments on what the client/patient thinks is happening or experiencing. We compare what the client subjectively feels/thinks with what the objective EEG and psychometric scores indicate and line those up. If the client indicates depression and the EEG/PAR also shows depression within the range, the odds are pretty good that depression should be targeted. If, on the other hand, the client subjectively feels depressed, but the EEG and psychometric scores do not indicate that, the therapist can use that information to "dig deeper" to see if the client's subjective feelings are situational based, health based, or brain based.

PAR was developed as a screening tool so the therapist can use it as a talking point with the client based on how the client's brain is organized, what pre-dispositions the client may be prone to experience, and what the client believes is going on. This can add a valuable tool to the therapist's practice to target specific areas of concern for the client.

Clinical Syndromes

	Error prediction 95% range	Trait prediction (>61)	Pathological prediction (>70)
Anxiety	-22 to 4	57	65
Somatoform	-13 to 9	50	81
Bipolar	-3 to 22	65	74
Dysthymia	1 to 28	55	69
Alcohol Dependence	-23 to 1	51	74
Drug Dependence	-15 to 9	49	71
PTSD	-11 to 15	65	81
Thought Disorder	-4 to 15	57	74
Depression	-20 to 6	74	94
Delusional	-5 to 16	71	76

Score prediction (95% confidence interval)

Personality Traits/Pathologies

	Error prediction 95% range	Trait prediction (>61)	Pathological prediction (>70)
Schizoid	-17 to 10	29	62
Avoidant	-12 to 16	69	45
Depressive	-16 to 18	50	57
Dependent	-18 to 9	62	48
Histrionic	-13 to 2	65	91
Narcissistic	-5 to 14	50	50
Antisocial	4 to 28	42	48
Sadistic	-19 to 0	65	65
Compulsive	-1 to 16	57	96
Negativistic	-25 to 0	60	65
Masochistic	-14 to 19	60	48
Schizotypal	-13 to 12	43	68
Borderline	-13 to 11	64	62
Paranoid	-13 to 12	62	80

How well can we predict pathology using brainwave in percent correct