

## Summary Information

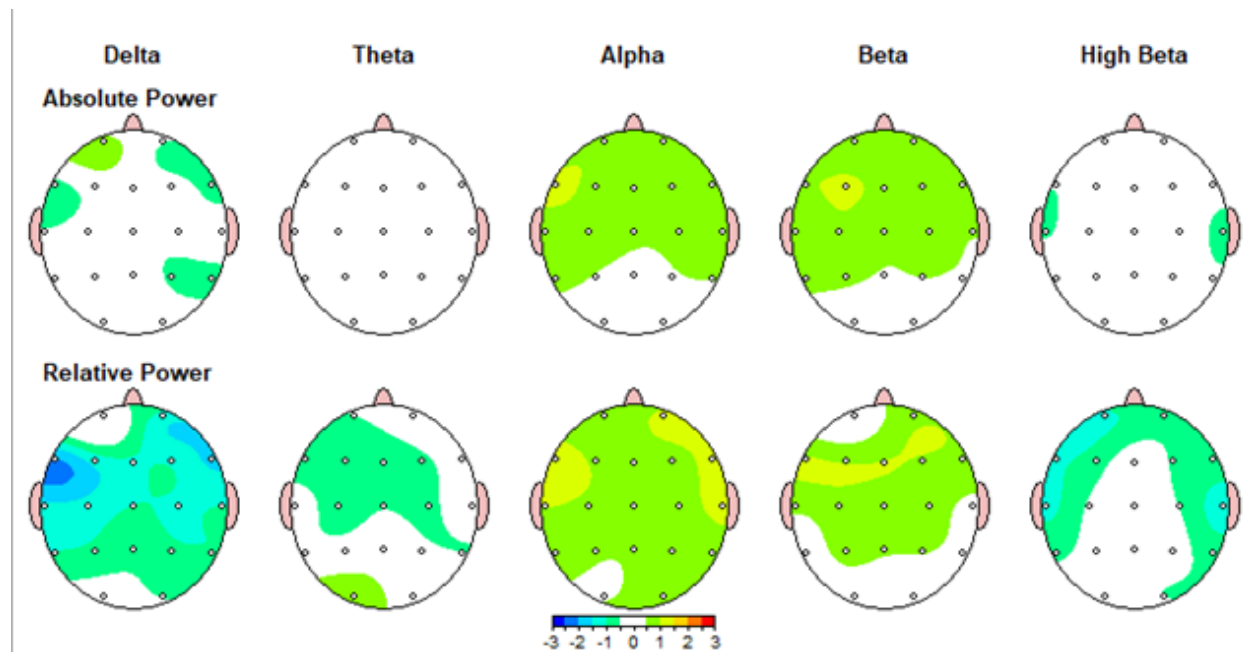


Figure 1: before KOIOS

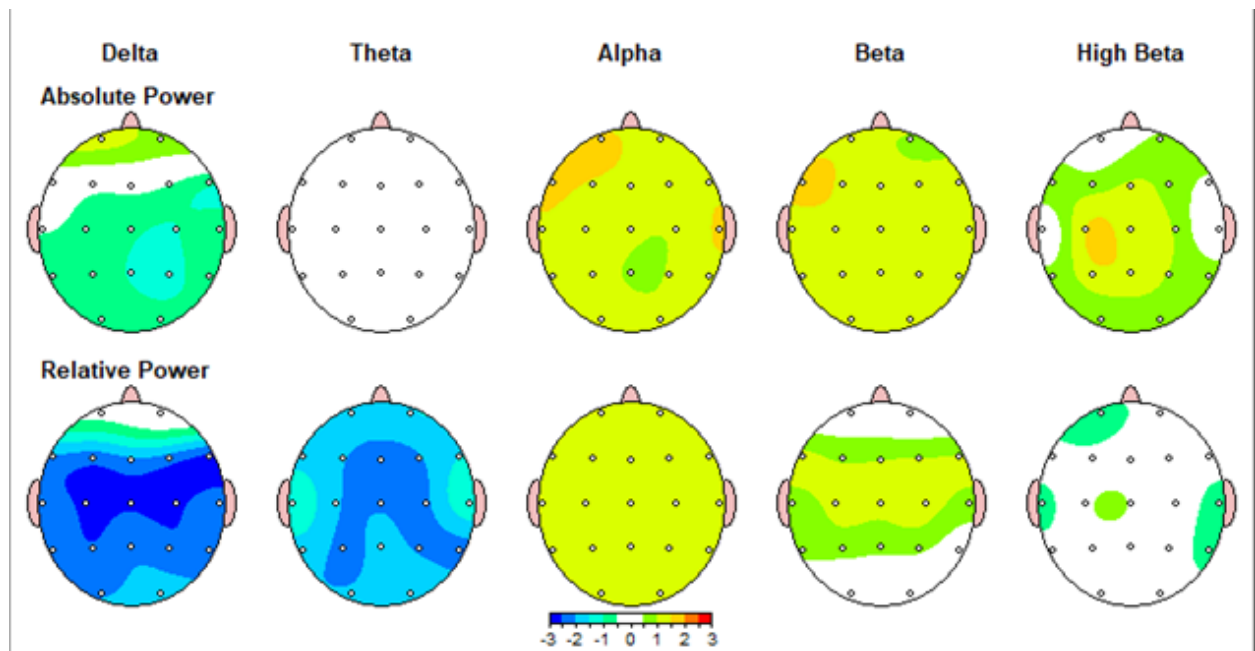


Figure 2: two weeks after the KOIOS protocol

When comparing the general summary information figures 1 and 2, there are three main components that are noted. The first being a decrease in slow activity (delta and theta). For many, a decrease in slow activity can lead to quicker thought processes, better energy, sharper focus and an overall sense of mind

clarity. The second finding is the increase in alpha. An increase in alpha will be important for many people as it is the brainwave responsible for homeostasis (an idling rhythm, or state of “normal”). In faster states of alpha it is also associated with a peak alpha frequency (this will be discussed later) which can be linked with overall intelligence. The third finding is the increase in fast activity (beta and high beta). This brain wave is needed to feel alert, focused, and motivated. Seeing an increase in this brain wave could have many implications relating to the overall drive and energy of a person that might lack beta and is a very positive finding.

### Theta/Beta Ratio

Intrahemispheric: CENTER										
	D/T	D/A	D/B	D/G	T/A	T/B	T/G	A/B	A/G	B/G
Fz - LE	1.05	0.48	0.58	6.13	0.45	0.56	5.84	1.23	12.89	10.49
Cz - LE	0.96	0.43	0.54	5.33	0.45	0.57	5.58	1.25	12.28	9.79
Pz - LE	0.94	0.36	0.53	6.59	0.39	0.57	7.03	1.47	18.10	12.35

Figure 3: T/B ratio before KOIOS

Intrahemispheric: CENTER										
	D/T	D/A	D/B	D/G	T/A	T/B	T/G	A/B	A/G	B/G
Fz - LE	1.13	0.25	0.41	3.57	0.23	0.36	3.17	1.60	14.07	8.80
Cz - LE	0.82	0.20	0.26	1.99	0.24	0.32	2.43	1.35	10.13	7.53
Pz - LE	0.79	0.12	0.24	2.36	0.15	0.30	2.98	1.95	19.25	9.87

Figure 4: T/B after KOIOS protocol

The comparison of figures 3 and 4 (specifically the highlighted numbers) is to show the decrease in theta/ beta ratio. A decrease in this number should present with an overall less distractible brain and much better focus.

## Peak Frequency Alpha

Intrahemispheric: CENTER								
	DELTA	THETA	ALPHA	BETA	HIGH BETA	BETA 1	BETA 2	BETA 3
Fz - LE	2.22	5.76	9.80	16.74	26.82	13.17	16.13	20.69
Cz - LE	2.30	5.72	9.71	16.65	26.89	13.16	16.16	20.58
Pz - LE	2.27	5.74	9.72	16.43	26.94	13.13	16.18	20.49

Figure 5: Peak frequency before KOIOS

Intrahemispheric: CENTER								
	DELTA	THETA	ALPHA	BETA	HIGH BETA	BETA 1	BETA 2	BETA 3
Fz - LE	2.02	6.08	9.95	17.13	26.81	13.24	16.24	20.75
Cz - LE	2.16	6.18	9.86	17.24	26.80	13.26	16.23	20.79
Pz - LE	2.16	6.15	9.94	17.11	26.86	13.17	16.24	20.68

Figure 6: Peak frequency after KOIOS protocol

This comparison of figures 5 and 6 are some of the most intriguing findings, as this number does not change on its own. Individual alpha peak frequency (IAPF) is calculated using a formulation called a fast Fourier transform (FFT). The IAPF value has been correlated to the brains cortex receiving a signal of information from the thalamus, but also relaying information back into the thalamus using a feedback loop. This is why this process is linked to faster information processing and functions like working memory and overall intelligence.