





February 2020

# **EXECUTIVE SUMMARY**

A total of 26 physicians completed the pre- and post-intervention assessments that consisted of the Neurozone Self-Assessment and the Mayo Well-Being Index (MWBI). The preassessment took place in September/October 2019 where each participant received a personalized report upon completion, as well as personalized coaching from the Elation team. The post-assessment took place in December 2019 and January 2020.

The mean age of the sample is 47,69 (SD = 9.19). Medical specialties included infectious diseases, urology, neurology, family medicine, surgery, internal medicine, palliative care, OB/GYN, orthopedics, radiology, psychiatry, and GP. Only the data from physicians who completed both the pre- and post-assessments were included in the analyses.

The table below provides pre- and post-intervention scores. All Neurozone-related scores range from 0 (low) to 100 (high), while the MWBI scores range from -2 (high well-being) to 9 (high distress).

Driver/Outcome	Pre-Intervention	Post-Intervention	Score Difference	Significant Change	Effect Size Estimate
Exercise	68.54	73.92	+ 5.38	.037*	0.43
Nutrition	69.15	72.04	+ 2.89	.241	0.24
Sleep/Wake Cycle	68.42	74.04	+ 5.62	.069	0.37
Silencing the Mind	26.27	42.96	+ 16.69	.005**	0.60
Social Safety	82.54	84.50	+ 1.96	.308	0.20
Goal-Directedness	76.77	81.38	+ 4.61	.013*	0.52
Collective Creativity	59.69	65.92	+ 6.23	.008**	0.57
Learning	75.92	78.96	+ 3.04	.374	0.18
Abstraction	76.38	79.27	+ 2.89	.223	0.25
Executive Function	49.77	59.15	+ 9.38	.008**	0.57
Self-Leadership	70.92	76.35	+ 5.43	<.001***	0.86
Innovation Capacity	70.88	75.50	+ 4.62	.001**	0.77
Learning Capacity	68.23	73.77	+ 5.54	<.001***	0.81
Resilience	73.19	77.92	+ 4.73	.001**	0.74
Brain-Body Optimization Score	65.27	71.19	+ 5.92	<.001***	1.02
Mayo Well-Being Index	2.77	1.35	- 1.42	.001**	0.76

Results show significant improvements (p = <.05) across four drivers, as well as the 5 Neurozone-related outcomes. The MWBI showed a significant decrease, which is indicative of reduced distress and increased well-being. The majority of drivers and outcomes that showed significant improvements, exhibited medium to large effect sizes (.02 = small; .05 = medium; .08 = large).

### RESULTS

#### **Driver Outcomes**

The pre-post intervention results show improvements across all 10 drivers with 5 drivers showing significant improvements. These drivers include Exercise, Silencing the Mind, Goal-Directedness, Collective Creativity, and Executive Function. The Silencing the Mind driver showed the largest increase from 26 to 42, yet remains the lowest ranking driver. Social Safety has the highest optimization score at 85.



### **Foundational Drivers**

Improvements were observed across all four foundational drivers with the Exercise and Silencing the Mind (StM) drivers demonstrating significant increases. The StM driver exhibited the largest increase (+16) and the Nutrition driver the lowest (+3). The Exercise and Sleep/Wake Cycle drivers have the highest optimization scores at 74, and the StM driver the lowest at 42.



### **Emotional Drivers**

All three Emotional drivers showed improvements, with Goal-Directedness and Collective Creativity exhibiting significant increases from 77 - 81 and 60 - 66, respectively. Although Social Safety did not increase significantly, it remains the driver with the highest optimization score at 85.



### **Higher-Order Drivers**

Improvements were observed across all three higher-order drivers with Executive Function exhibiting a significant and large increase from 50 to 59. The Learning and Abstraction drivers showed comparable increases (+3) and optimization scores at 79.



#### **High-Performance Outcomes**

All four High-Performance Outcomes demonstrated significant improvements, with Learning Capacity showing the largest increase from 73 to 78. The Brain-Body Optimization Score also increased significantly from 65 to 71.



## Mayo Well-Being Index

The MWBI score decreased significantly from 2.77 to 1.35. These results are indicative of reduced distress and increased well-being following the intervention.



# CONCLUSION

The pre-post intervention results show that there were significant improvements across four drivers (Exercise, Silencing the Mind, Goal-Directedness, Collective Creativity), as well as all five Neurozone-related outcomes (Self-Leadership, Innovation Capacity, Learning Capacity, Resilience, Brain-Body Optimization score). Results also showed a significant decrease in the MWBI. Taken together, these results provide strong evidence for the efficacy of the intervention by the Elation team.

Thank you for providing Neurozone with the opportunity to conduct this study. Please feel free to contact us should there be any questions or concerns.

Kind Regards, Neurozone Reporting Team