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CONSTRUCTS AND DEFINITIONS

The definitions below relate to each of the 6 constructs measured during the NeuroPerformance Assessment (NPA). The first 3 definitions are for Stress related constructs. The last 3 relate to Focus constructs.

ACTIVATION BASELINE

STRESS CONSTRUCT

DEFINITION   A measure of mental activity during the nontask portion of the NPA, which reflects how "busy" the brain is during a restful period.

HIGH SCORE   A high score indicates a strong ability to appropriately quiet the brain during restful periods.

LOW SCORE   A low score indicates one of two things, either your activation baseline is too high or too low:

- Too high means the brain is more active during restful periods of the assessment than necessary. Constant mental activity may make it difficult to disengage the mind, which can be reflected in poor sleep quality or thought rumination (e.g., not letting go of mistakes or being kept awake by a 'spinning mind'). This can lead to making errors as tasks become more demanding, due to 'running out of gas' trying to keep the same constant high level of activation and/or "over thinking" things.

- Too low means the brain is less active than is optimal during nontask portions of the assessment. An under activated state may lead to one feeling not fully present, not able to pay attention well, and/or lead to difficulty getting maximally engaged for tasks. This is often demonstrated by needing external motivators like an impending deadline or consequence to decrease procrastination and increase effort when given a boring or challenging task.

SCALE

100%
Optimal Baseline
Activation Level

0%
Under Activated

0%
Over Activated

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CONSTRUCTS AND DEFINITIONS

MAX ACTIVATION

STRESS CONSTRUCT

DEFINITION

This metric reflects the change in brain activation between the resting and the CPT portions of the assessment.
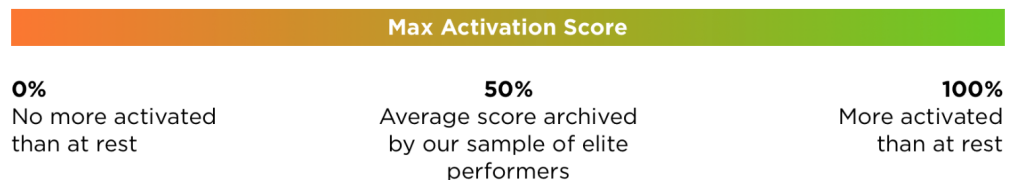
LOW SCORE

A low score indicates a challenge to increase brain activation during tasks. This is result of either: **A)** a challenge with getting more engaged with rising demands or **B)** a high level of brain activation during rest periods.

A) In the first instance, it is a challenge to pay attention and get "engaged" despite the fact that the demand may be high.

B) In the second example, coming into a situation when your mind is already very active or "overthinking" and adding more demand, your brain will exceed its capacity to perform optimally. Imagine going into a situation with an almost full 'stresscup'. Only so much can be added before the cup overflows, causing a loss of concentration or a mistake. Additionally, if nearly every situation is using all available "brain power", you are likely to wear yourself out sooner. Optimally, entering a situation with a more calm and "uncluttered" brain allows room to engage as the task demand increases.
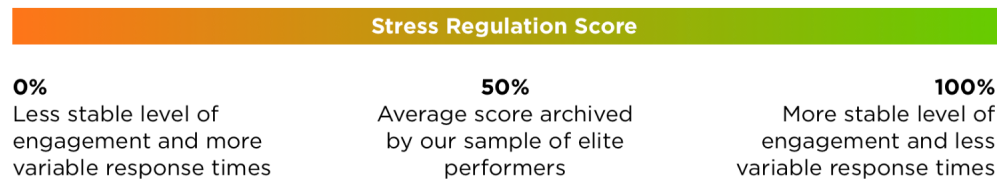
SCALE

Max Activation Score

0%	50%	100%
No more activated than at rest	Average score archived by our sample of elite performers	More activated than at rest

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CONSTRUCTS AND DEFINITIONS

STRESS REGULATION
STRESS CONSTRUCT

DEFINITION
This metric reflects both the stability of brain activation and the stability of response time during the varying demand levels of the CPT.

HIGH SCORE
A high score indicates greater consistency in both activation and response time. This means that even as the level of the demand changes, the attention and response time remain relatively constant.

LOW SCORE
A low score indicates inconsistent attention or response time throughout the task. Inconsistency in either area means you may be challenged to match your attention level to the task demand level, i.e., inefficiency of brain energy.
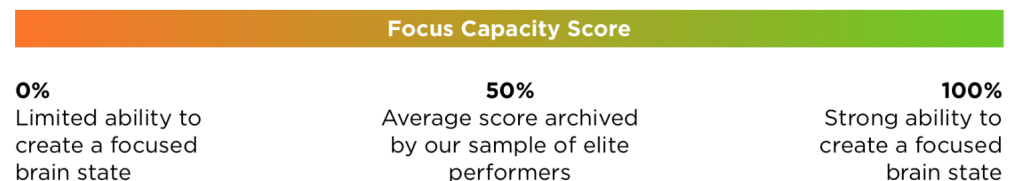
SCALE

Stress Regulation Score

0%	50%	100%
Less stable level of engagement and more variable response times	Average score archived by our sample of elite performers	More stable level of engagement and less variable response times

FOCUS CAPACITY
FOCUS CONSTRUCT

DEFINITION
This metric reflects the ability to create a focused brain state.

HIGH SCORE
A high score indicates a strong ability to pay attention when necessary.

LOW SCORE
A low score indicates a challenge to focus when necessary.

SCALE
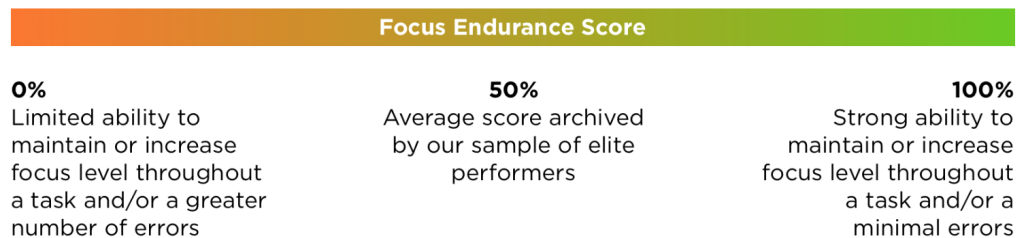
Focus Capacity Score

0%	50%	100%
Limited ability to create a focused brain state	Average score archived by our sample of elite performers	Strong ability to create a focused brain state

FOCUS ENDURANCE

FOCUS CONSTRUCT

DEFINITION   This metric is derived only from the task portion of the assessment and reflects attention and errors over an extended period of time.

HIGH SCORE   A high score indicates an improvement in focus level and an ability to sustain this from the start to the end of the CPT and make few errors.

LOW SCORE   A low score indicates that the level of focus decreased as the CPT progressed and/or there were a high number of errors.

SCALE

Focus Endurance Score

0%
Limited ability to maintain or increase focus level throughout a task and/or a greater number of errors

50%
Average score archived by our sample of elite performers

100%
Strong ability to maintain or increase focus level throughout a task and/or a minimal errors

IMPULSE CONTROL

FOCUS CONSTRUCT

DEFINITION   This metric reflects speed and accuracy of responses during the Continuous Performance Task (CPT) portion of the assessment.

HIGH SCORE   A high score indicates quick and accurate responses during the CPT.

LOW SCORE   A lower score on this metric indicates a higher number of impulse errors across the task.

SCALE

Impulse Control Score

0%
Greater number of commission errors indicative of poor impulse control throughout the task

50%
Average score archived by our sample of elite performers

100%
Minimal number of commission errors indicative of strong impulse control throughout the task