

ADIDAS GUIDANCE ON OVERCOMING PRESSURE IN FOOTBALL



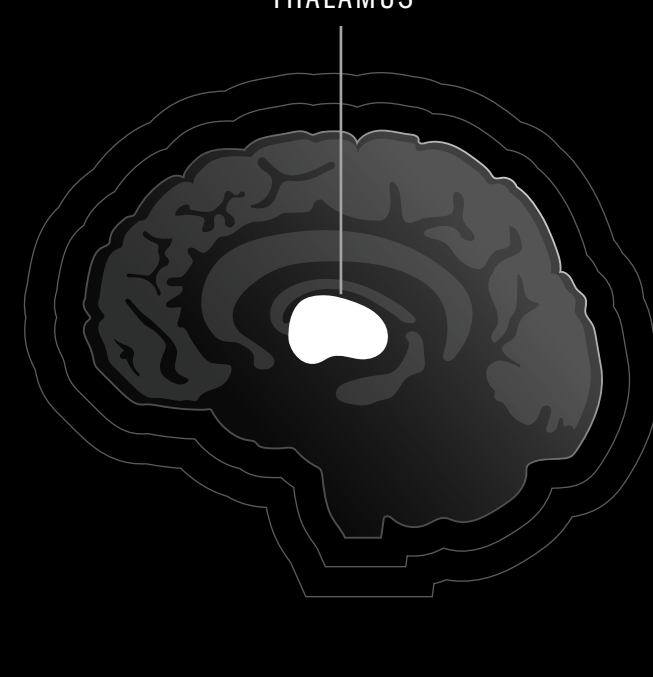
With the ambition to disarm pressure in sport – a feeling experienced by athletes of all levels – adidas has teamed up with leading sport neuroscientists, neuro11, to understand the impact it has within a game of football – in particular a penalty shootout scenario.

Working with **Emiliano Martínez** and **Stina Blackstenius**, as well as amateurs in the game, adidas and neuro11 delved into their minds to identify and analyse where pressure peaks.

From this data, a toolbox of techniques has been developed to help enable athletes to overcome it to access the optimal zone – the brain state in which athletes perform at their best.

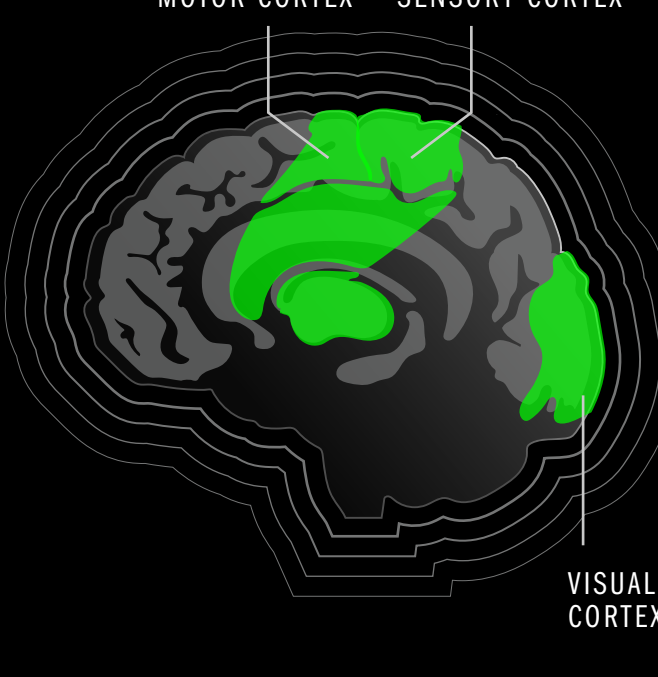


NEURO11'S STATE OF THE ART TECHNOLOGY, WHEN CONNECTED TO AN ATHLETE IS ABLE TO IDENTIFY WHEN THE BRAIN IS...



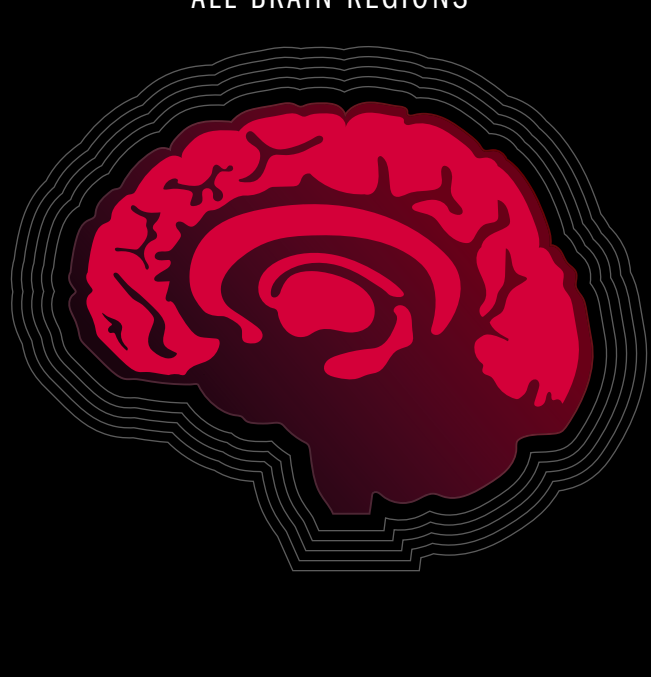
TOO LOW

Brain frequency is in the state associated with **relaxation and/or tiredness** – this is deemed as too low for optimal performance



OPTIMAL ZONE

Brain frequency is in the state where it is **mentally focussed and psychologically efficient** – this is deemed **ideal** for optimal performance and is often referred to as being 'in the zone'



TOO HIGH

Brain frequency is in an **over analysis state** – this is deemed as **too high for optimal performance/pressure is having a negative impact** – your brain is falling out of the optimal zone and losing focus

NEURO11 SAY
"The 'OPTIMAL ZONE' is the sweet spot between relaxation and over thinking. This is where the athlete's brain is in a state which is physically relaxed but mentally focussed, leading to optimal movement and performance.
 Training with pressure (e.g. adding distractions to your penalty routine) can help athletes learn how to stay in the optimal zone for the big moments."

KEY TERMS



BRAIN FOCUS INDEX

Individually calculated value which indicates **how deeply the athletes brain is in the optimal frequency zone** during performance and moments of pressure



BASELINE

Athlete's brain focus index pre training – **serves as a reference value.** The brain is not doing exercise and is under no pressure, so it allows for comparisons to be made when training and moments of pressure occurs



'ADDING' PRESSURE

Implementing a tactic to the athlete's training session which **intentionally puts pressure** on them – i.e. adding a distraction before a penalty is taken



IN THE ZONE

Brain focus index shows **athlete is in the optimal zone for performance** – a perfect balance of being mentally focused and yet physically relaxed

PRESSURE IN FOOTBALL

Whilst **pressure** looks and feels different for each athlete some of the **contributing factors** can be:

- Time constraints in-game
- Self-expectation
- Match-critical moments – i.e. last-minute penalty
- Social pressure: desire to not let your team down
- Wanting to avoid injury



STINA BLACKSTENIUS

PENALTY KICK PRESSURE

IN GENERAL

11.7%

PENALTY SHOOTOUT

6.7%

IN-GAME

SHOTS MISS THE TARGET COMPLETELY

CLUB VS COUNTRY

6.1%

PENALTY SHOOTOUT FOR CLUB

17.5%

PENALTY SHOOTOUT FOR COUNTRY

SHOTS MISS THE TARGET COMPLETELY

PENALTY LEADS TO VICTORY

TEAM A	☒	☒	☒	☒	☒
TEAM B	☒	☒	☒	☒	☐

92% SCORE THEIR PENALTY

PENALTY LEADS TO A LOSS

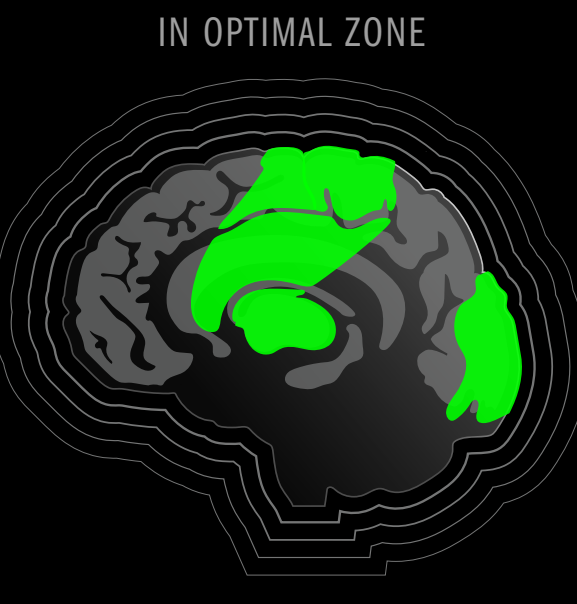
TEAM A	☒	☒	☒	☒	☒
TEAM B	☒	☒	☒	☒	☐

60% SCORE THEIR PENALTY

EMILIANO MARTÍNEZ VS GRASSROOT GOALKEEPER PRESSURE

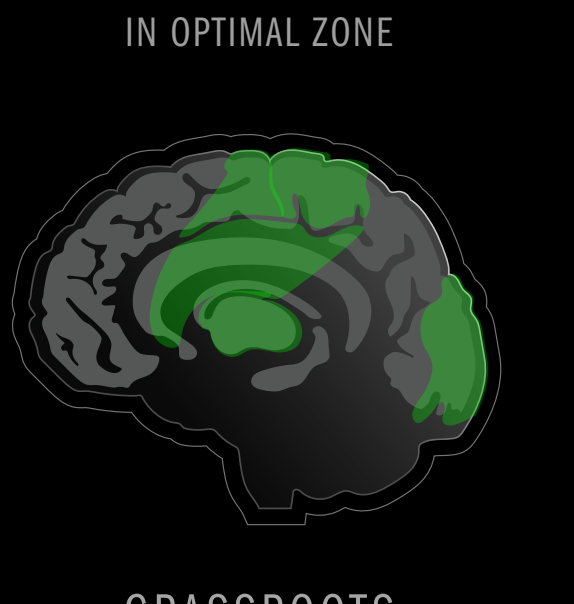
IN PENALTY SHOOTOUT

INCREASE **90%** IN OPTIMAL ZONE



EMI MARTÍNEZ

INCREASE **29%** IN OPTIMAL ZONE



GRASSROOTS GOALKEEPER

"Emi thrives in a penalty shootout condition, owed to his world-class ability to handle pressure of this type. He can analyse the shooter's body shape but then quickly find his switch to focus on completing the perfect movement required to save the shot" – NEURO11

When it comes to penalties, I know that the odds are in the shooter's favour. However, I also believe that they are under higher pressure than myself. I always just try to maintain a clear mindset and stay focussed" – EMI MARTÍNEZ

When faced with a penalty that could be shot anywhere as opposed to being informed left or right.

INCREASE **85%** IN OPTIMAL ZONE

EMI MARTÍNEZ

INCREASE **58%** IN OPTIMAL ZONE

GRASSROOTS GOALKEEPER

STINA BLACKSTENIUS VS GRASSROOT FOOTBALLER PRESSURE

SHOOTING TO FAVOURITE SIDE

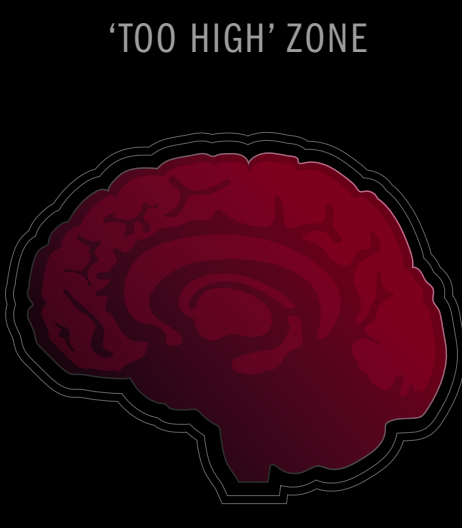
INCREASE BRAIN FOCUS INDEX **23%** STINA BLACKSTENIUS

INCREASE BRAIN FOCUS INDEX **9%** GRASSROOTS FOOTBALLER

"Stina's brain focus index did not decrease significantly when shooting towards her less favoured side compared to her favoured side (-15%) and she was also 6% less analytical when doing so." – NEURO11

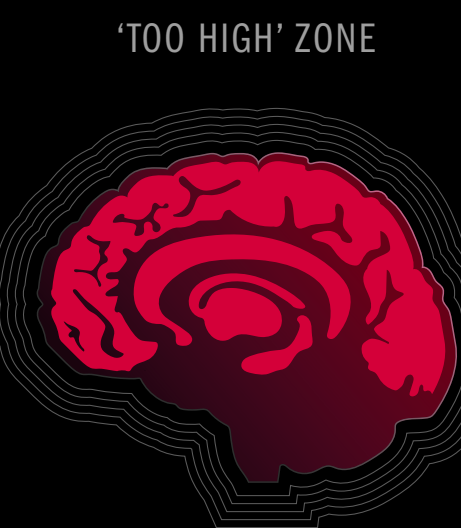
TAKING A PENALTY KICK

INCREASE **5%** 'TOO HIGH' ZONE



STINA BLACKSTENIUS

INCREASE **73%** 'TOO HIGH' ZONE



GRASSROOTS FOOTBALLER

"The insight feels reassuring as there no denying that taking a penalty feels extremely pressurized for me. This largely stems from my previous experience of missing a crucial one during a European Championship when I was 17. I find it difficult to fully detach myself from this emotion and to focus, so it's helpful to know that with a set routine I can reach my optimal brain zone." – STINA BLACKSTENIUS

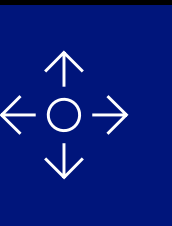
NEURO11'S TIPS FOR TACKLING PRESSURE

WHEN SAVING:



KNOW YOUR STATS:

Nearly a fifth of penalty shots are taken down the middle, yet goalkeepers dive in almost all cases. When you can, use this to your advantage and don't automatically assume that you should make a dive each time.



KEEP IT MOVING:

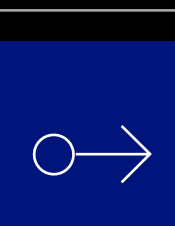
Before the shot is taken, move your body around as this will help reduce any physical stress build up in your body. Stay conscious to not overdo it, but any slight movement can be a distraction technique towards the shooter and lead to an increase in a successful save.



FIND YOUR SWITCH:

Identify the best moment in your routine to switch and direct your full focus to your saving action. This will equate to optimal timing and channel your commitment to saving the shot.

WHEN SHOOTING:



KEEP IT SIMPLE:

Your run-up should not give away which way you are going to shoot – this gives the goalkeeper an advantage. Likewise, avoid extravagant run-ups or unnecessary distraction techniques – instead, remain efficient and consistent with what you implement.



STICK TO YOUR DECISIONS:

Know ahead of time who will be responsible for taking the penalty before the match to avoid irrelevant and more emotional brain regions of the shooter getting activated at the time. Then pick your spot and stick with it – changing last minute will welcome unwanted distractions.



AIM HIGH:

Research from World Cups show hitting the ball into the upper third of the goal, no matter the side or area, offers a near enough to 100% rate of scoring! Continue to target this region in training to finesse your pre-shot routine and technique, so you can replicate in-game.

INSIDE EMI'S PENALTY SAVING ROUTINE

- On the goal line – I keep my body moving to reduce any physical stress build up
- They run up – I watch their body shape to inform my next move
- I find my switch moment and focus on my timing
- Decide where, or if, I am going to dive – I don't change my mind
- Clear my mind, watch the strike and focus on saving it

