

# How to increase players' performance in Esports

**Your brain can be compared to a muscle and is possible to train. You learn and train your brain all your life; how to read, how to associate, how to remember and e.g. how to focus. There are techniques to almost every skill. We will present a technique how to train focus and how that skill can help you to become a better Esports athlete.**

Our vision is to provide society with the means to improve focus which is directly correlated with improved performance. If we can make this possibility accessible to everyone, we can help create productive members of society. Just as education and health issues lead to equality between the sexes and neutralize socio-economic differences, an improved focus will; a potential lack of support at home or in school can to some extent be replaced by an improved focus. We will provide them with the means to achieve that.

In this White Paper we primarily address the Esports market.

Esports is becoming more and more mainstream. It is constantly adapting and evolving. Much of its recent trends follow along the lines of those we see in traditional sports. Mental coaches help the players with nerves and tries to build the players mentally in preparation for competitions. Nutritional coaches are brought on to introduce a healthy diet to maximize training and learning output. Training facilities are offered to help separate work and play. Coaches use in-depth analysis in forms of statistics and watching replays are being introduced into the daily routine. Teams do anything in their power to gain an upper hand over their rivals. Competition is always fierce and newer hungrier teams are always trying to prove that they belong in the upper echelons of esports. The smallest of mistakes can decide the outcome of an entire match, game, or even tournament.

**High focus is thus one of the most crucial features of a successful esports team.**

Improved control of one's focus is directly correlated with improved performance when it matters the most. Without focus training players easily lose their cool in high-pressure situations, fails to get the correct read on their opponent's game plan, makes simple mistakes which can be taken advantage of by the opposing team.

Competition is fierce and you want to use all available means to perform at your absolute best. For an Esports athlete that includes, besides playing and training on specifics in your game, getting enough sleep, physical training, eat healthy food – and train focus. To be able to obtain, maintain and quickly retain your focus is essential in any sport, but very much so in Esports.

**We will show you one way of training your focus skill.**

The technique, or method, used to measure focus is called EEG. EEG stands for Electro Encephalon Graphs and is a method for reading, interpret and provide feedback on the electrical signals from the brain. The brain signals are picked up from the brain via a headband with sensors. The technique has been used within medicine since the early (nineteen)sixties.

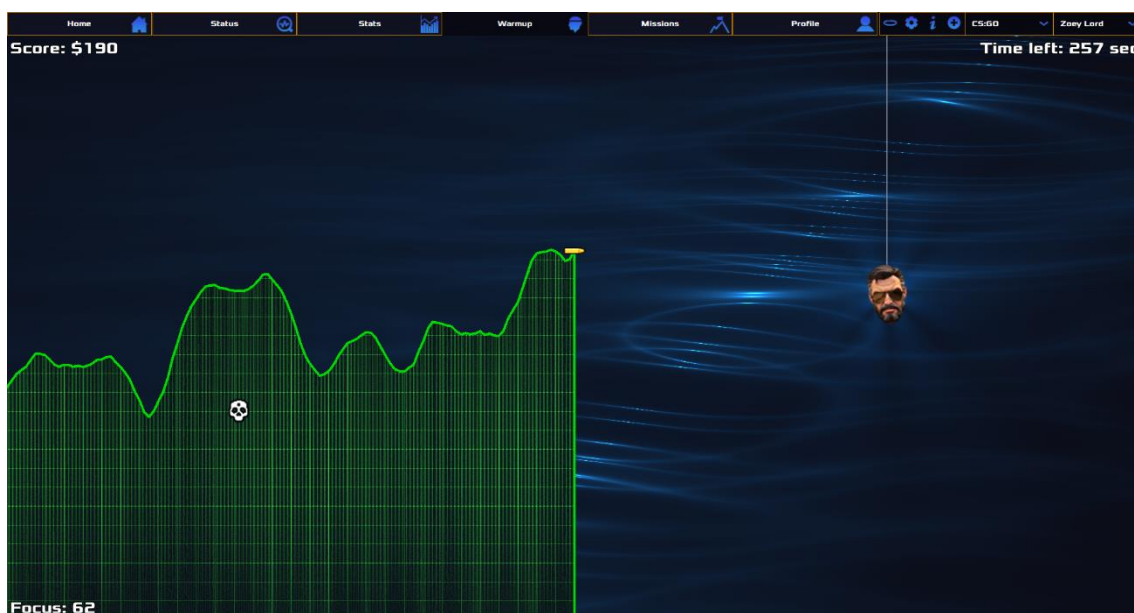
Currently there are a few tools that offers a possibility to train focus and only one of them are adapted to fit the Esports market; FO:CS [ˈfoukəs]. Two basic requirements should be fulfilled to fit the Esport market:

- 1. The headbands must be adapted to simultaneous use of headset**
- 2. The software must be motivating for an Esports athlete to use.**

The FO:CS headbands (currently under development) are especially adapted to the esports market both to physical appearance and functionality. The headbands are comfortable and compatible with headsets. Once strapped on and connected you will forget it. It is an unnoticeable wearable.

The statistical focus data presented in FO:CS software is directly connected to the performance of the players in their game be it CS:GO, Dota 2, Lol or Valorant. This direct connection helps the player to identify performance related to focus.

The training of focus can be made directly in FO:CS with a simple tracking graph where you follow your performance, just looking at the graph aiming for the hanging goals.



A more thorough training is made in FO:CS Play; a game developed to attract a gamer with many varied tracks and set up for the game. You manage a ball with your focus; the better you focus the smarter the ball will roll along the many tracks.



All (bio)feedback from FO:CS is given in real-time so you will learn to identify how you feel when you are focused (and not). Thus, you will learn how to set yourself in a focused mode, deliberately.

**These two skills – 1) to identify your focused state of mind and 2) deliberately focus, will help you to become a better Esports Athlete.**

The interpretation of the brainwaves, i.e. the electrical signals from the brain, and the algorithm used to identify a focused mind in FO:CS is based on numerous EEG biofeedback studies.

Some studies even point to that neurofeedback training can increase your reaction time, e.g.

<https://ntnuopen.ntnu.no/ntnu-xmlui/handle/11250/282581>

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**Beta1 training** led to an increase in arousal associated with **faster reaction time** and an increase in the target P300 amplitudes. Such changes were not found in the active control group and were thus attributable to the neurofeedback training.

**Beta 1 training is performed in FO:CS**

**Sign up to be continuously updated**

Sign up via our website to stay updated. Get first in line for the headbands and get a headstart with your focus training [www.focs.gg](http://www.focs.gg)

If you have any questions or feedback, join us on [discord](#).

**External references**

[Head Games - Injecting sports psychology into esports](#)

Extract: "I think what [teams] should add is the deep focus during training," he said. "What usually I see in houses is kind of a casual focus, then training happens and it's the same casual level of life, and then training ends and it's the same casual level of life. But in the best teams, from what I see, life is very relaxed and free, and then when work starts -- work starts and everyone goes full-on and focused [with] no mistakes forgiven. No lapses in effort are allowed by the players to themselves. They themselves are regulating that effort."

Weldon Green

[EEG monitoring and training as a new option to improve focus during tasks and performances in a competitive VUCA<sup>1</sup> world.](#)

Extract: "Since user experience paired with a well working technical solution is key features, companies with prior experience in the field of neurofeedback will most likely to have the advantage in conquering this market. The most extensive research has been done trying to improve the level of focus and the ability to relax and reduce stress. These should be the first "non-medical" applications to offer neurofeedback to a healthy target group. A tailored solution with a clearly defined target group will most likely be the right way to enter the market."

MD Neuroscientist Philipp Heiler

[Mental Performance Training for Professional Esports Gamers](#)

Extract: "Furthermore, we can collect psychophysiological activity by measuring an eGamer's heart-rate, respiration, skin-conductance, skin-surface temperature, and muscle tension. We can then determine from this data whether the performer is experiencing good stress (alertness) or distress (anxiety). With this understanding, we can then improve the player's awareness of what triggers specific emotional reactions within them and provide the mental skills and strategies necessary to help them communicate efficiently and calmly with their team mates, perform better, and improve their overall well-being."

Itzik Zur, Ph.D.

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<sup>1</sup> VUCA is an acronym for volatility, uncertainty, complexity, and ambiguity

### [How esports competitors prepare, mentally and physically](#)

Extract “Beyond the physical, there’s a second aspect to achieving elite esports status. Attaining the proper level of mental fitness – focus, wakefulness, reaction time, and clear, strategic thinking – is crucial. Along with this kind of nutritional support, esports athletes are also turning to a mental training component. Many high-level competitors are finding that they are subject to frequent emotional swings that aren’t seen as often in traditional athletes.”

Aurangzeb A. Durrani

#### **The author**

Bitte Hanell, CEO of Interactive Productline. System Engineer, Stockholm University. Bitte worked for eleven years at Cap Gemini with software development, project management and quality certification. The last seventeen years she has run the company including hardware development and studies of EEG.

#### **The company**

Interactive Productline was founded in 2002 launching the first commercial EEG product in the world and today one of the key players on the BCI (Brain Computer Interface) market . About 15 million people around the globe have since tested their ability to focus using Interactive Productline’s products. The company switched to software focus training products in 2017.