Abstract

To win at sports, an athlete requires excellent skill and a strong mind, which are mainly determined by implicit (unconscious) processing in the brain, as well as good fitness. We are working to elucidate the implicit brain functions related to an athlete’s skill and mental state in sports that involve an instant interpersonal interaction, such as baseball, by integrating brain science and information communication technology (ICT). We use “body-mind reading” techniques to decode those mechanisms based on various biological data obtained from the athlete’s body, and employ multiple research approaches that include realistic field measurements and precisely controlled experiments. Our findings will make it possible to assess athletic ability and level, and also help to improve and enhance an athlete’s brain function and performance in combination with intuitive multimodal feedback.

Reference


Contact

Toshitaka Kimura  Sports Brain Science Project
Email : kimura.toshitaka(at)lab.ntt.co.jp