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***The construction and legitimizing of a neuroscience concept (CEF) in talent identification***

**Abstract**

Recent scientific debate in sports has come to focus on how neuroscience can help in explaining sports performance and the development of expertise; and in the process of talent identification. It has been argued that instead of relying on coaches' subjective assessments the process of selection should be based on general metrics of the brain through standardized testing.

Cognitive executive functions (CEF) are highlighted as one of most important neurological function in the search for talents. Studies of brain activity have suggested that children should undergo neuroscientific testing to determine the appropriate cognitive executive functions (CEF) for elite sports. This presentation builds on previous work on the implications of a neuroscientific ontology in sports and Bruno Latour's work on the construction of scientific facts.

Using discourse analysis, the presentation discusses the production and popularization of CEF as scientific facts. In our findings we identify how representations of brain activity are visualized and legitimized and how the out-of-context tests are translated into facts about brain functions. The CEF test results are produced as inscriptions of undisputable facts, claiming that the results show prerequisites for sporting success. On the contrary, we argue that the mind-brain-behaviour relationship cannot be reduced to CEF tests. Instead, we urge other researchers to direct a critical gaze on neuroscientific truth-claims and taken-for-granted facts in the area of sport in general and in talent selection in particular.

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