

## **Forschungsgesuch Gygax**

### **The mental representation built by athletes in sport situations: Differences between expert and non-expert athletes**

#### **Summary**

The aims of this project were threefold. First, it stemmed as a continuation of Part A (2004-2005), which mainly intended to identify the content of football players' verbal mental representation built during sport situations. Second, and following the results of Part A, this project was aimed at investigating both athletes' representation of others during sport situations (Experiment 1) and athletes' representation of emotional reaction (Experiment 2). Third, this project directly addressed the notion that athletes' mental representation is both verbally and visually constructed (Experiment 2).

In Experiment 1, using a psycholinguistic paradigm, we were interested in assessing the individualistic and collective mental representations of different football players of three levels of expertise. In high level football (and more generally in competitive sports), athletes promote their own personal career as professional football players, which may lead them to adopt more self-centred representations of the game (Gygax, Wagner-Egger, Parris, Seiler & Hauert, 2006). In this experiment, we were particularly interested in the potential cognitive differences between football players of different levels of expertise, as mirrored by the league the players compete in. The cognitive processes involved in football are particularly interesting as team sports require particular mental representation skills that permit, for example, anticipation, symbolic representations of team structures, and proper role understanding (Allard & Starkes, 1991). In essence, Experiment 1 (and Experiment 2 for that matter) was rooted in cognitive and social psychology.

In Experiment 2, we were interested in affective mental representations of football players, again, of different levels of expertise. We investigated emotion inferences made by football players when reading game situation scripts. Different modes of representations were examined: (1) verbal representations and (2) visual representations. We were particularly interested in this issue, as Zwaan and colleagues (2004) have shown that perceptual representations are activated when people face a language comprehension task.