

## WHEN TO THINK AND WHEN TO BLINK

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### **Summary**

While sport scientists have been employed within football organizations for several decades, the addition of these professionals to elite rugby league teams is a relatively new concept. Consequently, 'expert' coaches, who have developed their skills in the lower grades, often with minimal resources and support staff, are now finding themselves working with highly-trained and experienced sport scientists, in the world's toughest rugby league competition. On the one hand, sport science has the potential to improve team performance, through innovation and best practice. On the other hand, if used incorrectly, sport science has the potential to increase the attentional demands of coaches (and players), and paradoxically reduce performance. A separate, but equally important challenge for coaches and sport scientists to understand is how each professional accumulates their specialist skills (i.e. expertise). Sport scientists are university trained, and often have a wide range of experiences, accumulated from a wide range of sports. They are comfortable with numbers, patterns, statistics, and technology. Conversely, coaches have learned their skills 'on the job', and while not as skilled with data analysis, have developed a 'feel' for the data that the sport scientists are 'analyzing'. So without all the technology at the disposal of the sport scientists, how do 'expert' coaches 'know'? The answer – *They Just Know!!* Indeed, studies from a wide range of domains (e.g. chess, sport, surgery, and even chicken-sexing) have demonstrated that experts have well-developed procedural knowledge, but in general, poorly developed declarative knowledge. <sup>1</sup> This presentation will explore some of the factors involved in the development of expertise. In addition, the coach-scientist relationship will be explored, with special emphasis on the challenges associated with different levels of expertise between the coach and sport scientist. Finally, examples will be provided to demonstrate how coaches and sport scientists can work collaboratively to achieve practical and effective solutions to sporting challenges.

### **References**

1. Horsey, R. (2002). *UCL Working Papers in Linguistics* 14: 107-117.