

## Experts from Australia visiting the Department of Sport Psychology and Research Methods in Tübingen

Cognitive factors such as anticipation and decision making skills or general executive functions are considered important performance factors in football. In light of the already highly differentiated diagnostics and training methods for physiological performance factors (endurance, speed, strength), both researchers and practitioners consider cognitive factors to have an important potential for performance enhancement.

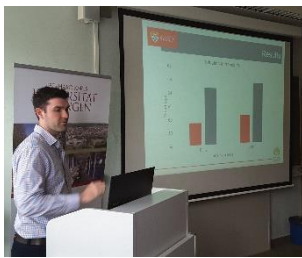
In order to investigate this potential through an applied perspective, the German Football Association (Deutscher Fußball-Bund, DFB) instructed the Department of Sport Psychology and Research Methods from the Institute of Sports Science in Tübingen to develop diagnostics with respect to anticipation and decision making in cooperation with coaches from the DFB. In the first phase of this project, which started in April, existing sport psychological approaches are being identified. Therefore, a workshop with experts from Australia was hosted at the Institute of Sports Science in Tübingen.



The picture above shows the participants of the workshop in Tübingen (from left to right): Dr. Johannes Raabe (Tübingen), Prof. Dr. Donna O'Connor (Sydney), Adam Beavan (Saabrücken), Prof. Dr. Oliver Höner (Tübingen), Dennis Murr (Tübingen), Dr. Florian Schultz (Tübingen), and Dr. Paul Larkin (Melbourne).

The first day of the workshop focused on approaches for the diagnostic of cognitive factors. Dennis Murr from the Institute of Sports Science in Tübingen reported from a pilot study that was conducted in collaboration with the youth academy of VfB Stuttgart. Initial findings of the evaluation of the implementation of a lab-oriented diagnostic for decision making skills showed promising trends. These were supported by positive feedback from practitioners. However, a detailed data analysis also indicated limits of a reliable implementation, highlighting the need for further development.

The next presenter was Adam Beaven, who received his BA (Honors) from Newcastle University in New South Wales (Australia) and is now a doctoral student within the international PhD program „Science and Health in Football” at the Institute of Sports and Preventive Medicine in Saarbrücken (Saarland University, Prof. Dr. Tim Meyer). Adam Beaven reported on the importance of executive functions in football as well as possibilities for assessing them. In addition to the project conducted at the Institute of Sports Science in Tübingen (investigating context-specific anticipation and decision-making skills), the project at the Saarland University will examine the potential for the diagnostic and development of general cognitive factors.

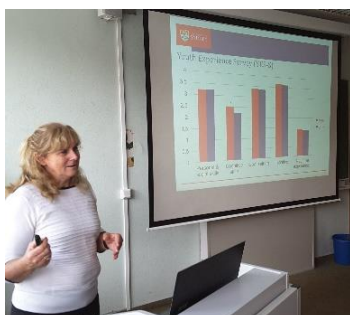


In his contribution, Dr. Paul Larkin from Victoria University in Melbourne (Australia) reported on various perceptual-cognitive skills underlying decision-making processes. A study that was conducted in collaboration with the Football Federation Australia revealed important results related to skills such as anticipation, pattern recognition, and knowledge of situational probabilities in football-specific decision-making situations.

To conclude the first day, Prof. Dr. Oliver Höner reported on the diagnostic approaches that were developed at the Institute of Sports Science in Tübingen in recent years. With respect to the diagnostic of anticipation skills he presented findings from studies by Dr. Florian Schultz and Alexander Schurr. In their lab-based diagnostics they found differences for football (U15 vs. U18 regional association) and team handball goalkeepers (professional vs. amateur) based on experience and expertise. Then, he discussed the approaches from Tübingen aimed at assessing decision making skills for football players, which will be further developed in close collaboration with the DFB.



An important contributor to the sustainable development of youth players’ cognitive factors is the behavior of coaches. Therefore, the behavior of youth coaches was the emphasis of the second day of the workshop. In this regard, Dr. Johannes Raabe from Tübingen discussed theoretical approaches, which will be used as the conceptual foundation to offer DFB competence center coaches within the talent development program information regarding the development of sustainable motivation of their players.



The final key note at this workshop was presented by Prof. Dr. Donna O’Connor from the University of Sydney (Australia) who can rely on decades of research experiences on topics such as coach education. In her presentation she lectured on the influence of coach behavior on the development of decision making skills of youth players. Her empirical studies show that overly frequent instruction from coaches can prevent youth players from engaging in sustainable developmental process for decision making skills.