SUPPORTING THE COACH WITH SCIENCE: THE IRISH EXPERIENCE

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Recognising the need for a strong sport science support system, a programme of biomechanical support was set up by Swim Ireland (the Irish Swimming Federation) in 2006. This programme, which forms part of a larger overall inter-disciplinary sport science and medicine service, aims to provide a comprehensive level of biomechanical support for Irish high-performing swimmers and their coaches to enhance performance at elite level. At the centre of the biomechanics programme is the swimmer-coach unit; their performance needs are critical. The scientist's role is to provide the coach with useful, user-friendly and objective evidence upon which the coach can make effective informed training decisions. Both qualitative and quantitative biomechanical assessment techniques are used to analyse swimmers in training and competition, which typically require the use of above and below water digital video recordings. Suitable intervention strategies for modifying swimming techniques, where necessary, can then be implemented and regularly monitored for effectiveness. The aim of this presentation is to provide an overview of the biomechanics support programme being provided to elite Irish swimmers and their coaches, with particular reference to: 1) competition analysis; and 2) two-dimensional video analysis. Such examples encourage the use of evidence-based coaching.