

THE APPLICATION OF SCIENCE IN THE TALENT DEVELOPMENT SYSTEMS OF A CLUB IN THE ENGLISH PREMIER LEAGUE

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Introduction

The identification and development of gifted performers are recognised by many club teams and national federations as key priorities for long-term success at both national and international level. Science-based support systems (e.g., physical preparation, psychological counselling, and computer-based match analysis) are now accepted as fundamental in the preparation of future elite athletes. The integration of science-based support systems within the development programme of an elite football club, with a particular emphasis of the physical preparation of youths, are considered in this presentation.

Wolverhampton Wanderers Football Club is a professional football club currently playing in the English Premier League. The club's youth academy aims to provide players identified as having the potential to become future elite performance with an appropriate learning environment to facilitate the realisation of their potential. A holistic approach to player development is adopted. From a physical conditioning perspective a scientifically endorsed curriculum designed to ensure relevant training methods are applied at appropriate stages of the players' development is in operation. Training is structured in blocks (mesocycles), each with a dominant emphasis and includes periods of relatively high intensity training and episodes of lighter activity so as to facilitate long-term player development. In recognition of the potentially confounding affect injury may have of the talent development process, a proactive approach to injury prevention is adopted. Exercises to improve strength, balance, muscle control, core stability and joint range of motion are routinely performed as part of every training session. A systematic programme of monitoring and testing complements the physical training curriculum. Players are assessed on a battery of physical (anthropometric) and physiological tests, administered at strategic time-points throughout the playing season. Test data are analyzed longitudinally to differentiate between adolescent performance and potential for progressions. Methods of estimating biological maturity and predicting adult phenotype (stature) are incorporated into the development systems. Information obtained from these assessments may be used in the evaluation of performance potential and in the conformation of future positional roles.

References

1. Williams, A.M. and Reilly, T (2000). *Journal of Sport Sciences*, 18:657-667.