

## New web-based tool to improve football development

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Dr James Dugdale is leading a three-year project designed to enhance the Soccer PDP platform. Credit: University of Stirling

An innovative sports science tool—based on the research of a University of Stirling academic—is aiming to revolutionize talent identification and development in youth football players.



The Soccer PDP platform provides <u>football</u> clubs with reliable data on a player's ability—while giving individuals the opportunity to engage with elite developmental resources and opportunities that are otherwise not available to amateur or youth players.

In addition, it provides children and youth players with information that will be of a wider benefit outside of football, including material on <a href="https://physical.org/physical.org/">physical activity</a>, psychological skills, and nutrition.

The web-based technology—which is commercially available and already being used by football teams—is based on the work of Dr. James Dugdale, a postdoctoral researcher in the Faculty of Health Sciences and Sport at Stirling.

Dr. Dugdale started work on the project—investigating the use of physical fitness testing within the talent identification and development process of youth players—while a Ph.D. researcher at Stirling. He is now working with colleagues—and the Stirling-based company behind Soccer PDP—on a new three-year, multidisciplinary study to support its further development.

Dr. Dugdale said: "My research focuses on identifying the best measures and tests to assess youth players and interpret the results of these tests appropriately. My Ph.D. research concentrated solely on physical tests and measures, however, the intention is that the Soccer PDP platform will be an interdisciplinary tool incorporating additional contributing factors to development—such as psychology, nutrition, skill and technical ability."

Soccer PDP aims to provide a similar level of support to youth players that many professional football players receive, in terms of education, coaching and the testing and monitoring of various attributes associated with successful development. It allows players to create their own



interactive account, attend physical testing sessions, access online questionnaires, and engage with a range of educational and developmental resources.

Soccer PDP has been driven by Dr. Dugdale's research, which—through the use of simple and commonly used field-based fitness testing—provides a tool to compare performance standards between the amateur, development and professional levels within the Scottish Football Association.

Providing a comprehensive sample of around 400 youth football players aged from 10 to 17, the approach reported a 70 percent success rate in correctly identifying players who signed to a professional <u>youth</u> academy, compared to those who were playing recreationally as part of an amateur club.

"This is arguably one of the most comprehensive samples attained in this avenue of research to date," Dr. Dugdale said. "As I progress with my research, one of my objectives is to improve the validity of this testing battery to further increase this percentage."

Jacob Gordon, Director of Soccer PDP, said: "We are delighted to be working with experts from the Faculty of Health Sciences and Sport at Stirling in developing Soccer PDP. This partnership is extremely beneficial for us, as it ensures the platform is underpinned by tangible research.

"More and more professional football clubs are embracing sports science as an important component to player development, however, young players out with the academy structure are missing out. This is the essence behind the creation of Soccer PDP.

"We are developing a sports science tool that enables our young talent to



monitor and evaluate their physical and mental fitness and skills, with the aim of helping players, coaches and parents to best meet the demands of modern football.

"The system empowers players and their coaches with a clear focus and plan in regard to training and match day performance. We aim to help the industry create a culture where sports science forms an integral part of the development of all players—not just those in elite academy football.

"The objective of Soccer PDP is to provide a comprehensive, elite Academy development process, to all players at a cost that is accessible for everyone, across all levels of the sport."

## Provided by University of Stirling

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