The brains behind the 'beautiful game' Debbie Derry 13 June 2010 Issue: 128



They dissected, debated and metaphorically dribbled and did exactly what FIFA President Sepp Blatter has warned against - over-analysed the game of football. But they are the brains behind the 'beautiful game', whose goal is to score big with science that will benefit the sport.

They are the men and women who participated in the Second World Conference on Science and Soccer hosted by Nelson Mandela Metropolitan University in Port Elizabeth, on South Africa's east coast, last week.

Close to 100 delegates from sport science and related research institutions from around the world attended the two-day conference to benefit from research that examined everything from the physiological demands on elite female soccer players to news of an Australian under-10 development programme for the country's 2022 Fifa Soccer Cup squad.

And in between there was information that found balance to be the single best predictor of performance in a one-on-one game of soccer; that speed and agility are relatively unrelated soccer skills (just because you have one, does not mean you have the other); that the reactive ability of top players is what sets them apart from those in the lower leagues; and that the intensity with which wingers and attackers play is likely to lead to muscle damage.

The sport scientists, who are staying on in South Africa to support their national sides, are eager to share their findings and have their suggestions implemented to benefit the world's most popular sport.

Implementation of their research findings, however, remains a concern to those who have devoted themselves to helping to improve the game, mainly via the performance of both players and coaches.

"Science needs a bigger footing in the game. There is a gap between our research and implementation of our findings. We need to find out what is preventing coaches from not picking up on our studies," said Dr Barry Drust of Liverpool John Moores University, one of the conference's keynote speakers. "Science does not always lead to practice."

While Blatter has argued that soccer should be "kept natural" and should not be over-analysed, the great Brazilian footballer Pele has sided with scientists. "In order for the game to move forward, we need to understand it better," the man recognised as one of the world's greatest footballers was once quoted as saying.

Organiser of the conference and director of sport at the host university, Dr Richard Stretch, hailed the conference as a step in the right direction as it pulled together academics, sport scientists, sports medicine specialists, physiologists, teachers, students, administrators and coaches - all with an interest in the scientific study and-or practical performance of soccer from grass roots to elite level. It followed the first conference held in Liverpool in 2008.

He said for various reasons soccer coaches and administrators, particularly in South Africa, have not turned to sport science to assist them to answer some of the fundamental questions that elite and potentially elite players and teams are faced with on a daily basis.

"Only when sport scientists are fully involved in all aspects of the identification, preparation, training and match strategies and analysis, can we expect to optimise the vast pool of natural talent available in South Africa," Stretch told *University World News*.

In the interim, however, coaches and administrators who attended the conference would be able to return to their teams with "new ideas based on sound scientific evidence" and thereby highlight the important contribution science can make to soccer.