

Submission to Senate Inquiry into the practice of sports science in Australia

Daniel Greenwood

Senior Sport Scientist – Biomechanics/Skill Acquisition

Queensland Academy of Sport

**Any views or opinions expressed are solely for those of the author and do not necessarily represent those of the Queensland Academy of Sport or the Queensland government*

The following submission represents a summary of key issues to be brought to the attention of the Australian Senate Inquiry into practices of sport science in Australia. The content within this submission is not vastly detailed, as this specificity has been covered in other submissions made to the inquiry, for example the submission of the Queensland Academy of Sport, Sport Science Group of which I am also a part. Instead the aim of the current submission is to highlight key issues which could form part of the inquiries future discussions.

1. Current definition of sport science: "Sport scientists apply theoretical principles from scientific disciplines to sport specific settings"

The absence of any precise detail within the definition of sport science practitioners and practices has led to an extraordinarily broad classification which labels individuals from a wide range of backgrounds and qualifications in the same way. Importantly this has left no standardisation across the industry and allowed a variety of 'pseudo-science' practitioners to operate under the same classification as highly qualified and experienced specialists. A new definition which recognises discipline specific knowledge is required to classify and place boundaries on practitioners, standardising expectations of stakeholders across the industry.

2. Current qualification standards

While some accreditation bodies have provided definitions of sports scientists (e.g. Sports Medicine Australia, Exercise and Sport Science Australia) the qualifications required within these designations are minimal. Current accreditation requires completion of a 3 year undergraduate human movement degree (or similar) and a minimal amount of practical

experience. When placed within the context of the role of a sport scientist and their influence on human subjects this ratification is inadequate. Minimal standards, requiring postgraduate study and work experience completed under qualified mentors are required to increase standards of work and expectations across the industry. Any accreditation system should recognise the importance of continual developmental and include a tiered membership structure based on qualifications and experience. To aid an accreditation process a distinction between the ability to practice, which requires adherence to specific ethical and professional guidelines, and becoming an accredited, endorsed practitioner could be beneficial.

3. Accreditation groups do not reflect the needs of the entire industry

The current accreditation structures are predominately designed for allied health practitioners who administer exercise physiology to the general public. Consequently representation and requirements of applied practitioners in elite sport are lacking within the current accreditation structures. Any accreditation structure should reflect the roles of different professionals within the same industry, in particular highlighting the difference between an applied sport science practitioner and an exercise scientist in the allied health field. An industry wide accreditation structure should acknowledge the needs of all professionals who contribute to the industry in different ways.

4. Code of ethics required and consequences must exist

The absence of an overarching accreditation system allows anyone to label themselves a sport scientist and practice sport science in any manner they see fit. Regulation of the industry would allow the implementation of an overarching code of conduct for all practitioners. This is especially relevant as sports science involves research and testing of human subjects, a practice which should adhere to stringent ethical and professional standards at all times. An accreditation process allows the application of industry wide ethical, moral and professional standards, which would not only set expectations but also provide accountability of behaviour if standards were not met.

5. *Management understanding of detailed sport science*

At the elite level sport scientists are highly specialised within their specific discipline. The multi-disciplinary sport science teams which surround elite athletes possess a significant knowledge base created through theoretical and experiential knowledge. This creates difficulties for managers of sports scientists and sports science groups if they have not come from this background. It is the managers who are responsible for all decisions made and directions given, however the disparity in terminology and understanding between the two parties can frustrate both groups. In order for management to make informed decisions consultative processes with sport scientists are required. Conversely sports scientists need to better elucidate issues and reasoning for their ideas to management. This highlights the need for a collaborative process which benefits from open communication channels between managers and scientists with athlete health as a focus.

Summary

An industry wide accreditation system is required to implement professional, ethical and moral standards on all practitioners. This system must recognise the discipline specific nature of sport science and therefore contain discipline specific qualifications. The current accreditation within the industry fails to represent the needs of all scientific disciplines and the different ways professionals contribute to the industry.