**Coventry University** 



### DOCTOR OF PHILOSOPHY

#### The Development of a Model to Evaluate the Effectiveness of Applied Sport **Psychology** Practice

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# PART I

## BACKGROUND TO THE RESEARCH

The aim of Part I is to present and discuss the background to the initiation and development of this thesis. In the first section recent developments in sport science support in the United Kingdom are discussed and their relevance to this thesis explored. In the second section the role of the collaborative institution, the English Sports Council (West Midlands), is discussed and the demands and the potential conflict of interest this placed on the research and researcher considered. The implications of these demands for philosophical and methodological decisions made throughout the thesis are examined.



# UNDERSTANDING THE BACKGROUND TO THE RESEARCH

# **SECTION 2.1**

### RECENT DEVELOPMENTS IN SPORT SCIENCE SUPPORT IN THE UNITED KINGDOM

### 2.1.1 Introduction

The aim of this section is to consider the recent growth of applied sport science, and specifically sport psychology in the United Kingdom. Arguably, the developments are unprecedented and discussion of these will be invaluable in situating the thesis within the current National context. Further, the roles which the British Association of Sport and Exercise Science (BASES) and the British Psychological Society (BPS) have adopted in supporting these developments are discussed.

### 2.1.2 Setting the scene

The initial proposal by the Department of National Heritage (1995) in the Sports Policy Statement Sport: Raising the Game to establish a British Academy of Sport recognised the role of sports science in the development of sporting excellence in the UK. From these initial proposals, the development of a central United Kingdom Sports Institute (UKSI) in Sheffield and a Network of centres around the UK and abroad has gradually transpired. The stated aim of the UKSI is to 'provide our best men and women with the facilities and support services they need to compete and win at the highest level' (Sport England, 1999).

The UKSI underpins and assists Sport England's World Class Performance Programme (WCPP) and World Class Potential Programme as well as equivalent programmes in the home countries (UKSC, 1998). WCPPs were set up in 1998 and aim to help talented individuals and teams improve their international ranking and win more medals and championships for the UK (ESC, 1998). The Programme helps indirectly by financially supporting the governing bodies of sport to enable them to deliver programmes of excellence. This may include the costs of top level coaching, medical care, sport science support, attending competitions and equipment requirements. Direct support in the form of subsistence awards is available to individual athletes via the governing body. These awards can help with a competitor's subsistence and living costs, taking account of earnings and individual circumstances.

As the UKSI develops, the governing bodies will be encouraged to integrate use of the services and facilities at the Institute into their WCPP (UKSC, 1998). The

performance development services available to athletes within the UKSI, its network and through the WCPPs are wide-ranging and comprise 40 services in total. These include:

- Notational analysis
- Physiological support
- Injury rehabilitation
- Sports technology
- Biomechanical analysis of performance
- Psychological support
- Sports optometry
- Sports massage
- Sports dentistry
- Physiotherapy
- Nutrition advice

The development and availability of these services will be phased in over a period of 6 years (UKSC, 1998).

These developments have been partially funded by Lottery Revenue money which has lead to an unprecedented input of funding into UK Sport. Indeed since 1994, £930.5 million pounds has been invested (Sport England, 1999). The provision of sports science support is integral to these developments and the funding available could result in the emergence of a first generation of professional sport scientists, including sport psychologists (Mahoney, 1999). These developments will build on the success of the Sport Science Support Programmes (SSSP) that have assisted governing bodies, through the National Coaching Foundation and UK Sports Council, from 1988 to 1998. A major difference between these programmes is that funding of the SSSPs was directly from the Sports Councils, whereas funding for WCPPs is devolved to the governing bodies who can then 'purchase' appropriate services. Arguably due to maturation effects and the level of funding available, the UKSI and WCPPs will have considerably larger impact than the SSSPs and serve to facilitate substantial growth in the field of sport science support.

In addition to these government driven initiatives, it is important to note that a number of sport psychologists work on a private consultancy basis. The demand for services appears to be increasing and this is serving to further fuel the growth of the profession.

### 2.1.2 Towards professional status for sport psychologists

As the UKSI and WCPPs develop and the services available to athletes increase, the role of sports science in supporting UK sport will grow. It is argued that as sports science support develops into a profession it is essential that practitioners are aware of and address professional issues. Specifically, this should include accepting the new levels of accountability and responsibility that come with professionalisation (Rowell, 1998).

BASES is the professional body for sport and exercise science in the UK and aims to address issues of accountability and quality assurance by monitoring and maintaining professional standards (BASES, 1999). A programme of Accreditation provides BASES with a mechanism for the quality control of services delivered by sport and exercise scientists. Accreditation by BASES, typically following a period of three years Supervised Experience, is recognition of the ability of a member to carry out quality research and/or provide scientific support services in sport and exercise science (BASES, 1999). Accreditation can be awarded in psychology, physiology, biomechanics and interdisciplinary disciplines. BASES also co-ordinates a programme of workshops and conferences designed to facilitate the continuing professional development of the Association's members. Further, a Code of Conduct has been developed which sets out the principles of conduct and ethics for the guidance of members (BASES, 1995).

Sport psychologists may also be members of the British Psychological Society (BPS). The BPS also has a Code of Conduct, provides opportunities for continuing professional development and holds a Register of Chartered Psychologists. This Register is similar to Accreditation in establishing professional standards because in order to be eligible a psychologist must have fulfilled minimum criteria. Biddle *et al.* (1992) noted that the BPS had been less proactive than BASES in the development of professional standards specifically for sport psychologists. Seven years later it may be argued that although discussions between BASES and the BPS have been on-going, the BPS is still less pro-active than BASES. Indeed at the time of writing, there were fewer than 30 chartered psychologists registered with an interest in sport

and exercise psychology (BPS, 1999) compared with 94 BASES Accredited sport psychologists (Cooper, 1999).

Both BASES and the BPS act as professional bodies for sport psychologists. As has been discussed they serve to regulate professional activity and strive to ensure quality assurance. However, it appears that currently BASES is playing a more important role in the development of applied sport psychology practice in the UK. Consequently, throughout this thesis reference to BASES and its policies has been made in attempting to reconcile the research findings with national developments in the profession.

### 2.1.1 Summary

This section aimed to develop a picture of the current status and nature of applied sport psychology in the UK. It is evident that a number of developments in UK sport are facilitating the growth of the profession and there is a need to address issues of accountability. Arguably, BASES is the primary professional body for sport psychologists and it has developed methods to ensure the preservation of professional standards. However, as will be discussed in more detail in Section 3.2, there is a need for further consideration of evaluation methods used in applied sport psychology practice.

# **SECTION 2.2**

THE ROLE OF THE COLLABORATIVE INSTITUTION: IMPLICATIONS FOR PHILOSOPHICAL AND METHODOLOGICAL DECISIONS

### 2.2.1 Introduction

It was considered appropriate to discuss how and why this thesis was initiated to increase awareness of and provide insight into the factors that have influenced its development. A key part of University College Worcester's (UCW) research strategy has been to develop a research degree programme (UCW, 1998). Within this strategy a number of fully-funded research scholarships have been offered. Typically, these scholarships are jointly sponsored by a collaborative institution and in this research the collaborative institution was the English Sports Council (West Midlands) (ESCWM). The aim of this section is to outline the role and expectations of the collaborative institution and how these have shaped the initiation and development of this thesis.

# 2.2.2 The involvement of the English Sports Council (West Midlands)

As part of their Regional Strategy for Performance and Excellence in Sport, ESCWM identified the need for regional level sports science support programmes to emulate the national level SSSPs (see Section 2.1) (The Sports Council, 1993). From this strategy document a network of four Sports Performance Centres (SPCs) was set up and initially funded to provide sports science support to regional squads and coach education. These four SPCs were situated around the West Midlands and included a SPC in the Department of PE and Sport Studies at UCW. The Worcester SPC was established in 1995 and aimed to:

- Provide a full range of facilities and support services needed by talented athletes to maximise potential
- Improve sporting skills and performance through the education of coaches

As part of the on-going development of the SPCs, it became evident that there was a need to develop formal methods of monitoring and evaluating the services being provided. Little direction for doing this was available from national programmes, so in order to pursue this a research studentship jointly funded by the ESCWM and UCW was established to commence in September 1996.

The aims of the research studentship were defined as (SPC, 1997):

- i. to develop an academically sound model for the evaluation of sport science support
- ii. to integrate the research findings into the work of the SPC
- iii. to disseminate the research findings to the other SPCs in the West Midlands to ensure the establishment of effective, consistent quality control mechanisms across the region

These aims highlighted the different interests of the joint funders of the studentship. Specifically, UCW's interest in the studentship was the development of a rigorously academic model that would fulfil the criteria of a PhD. In contrast, the ESCWM were arguably not concerned with the completion of a PhD, but the development and implementation of practical tools to evaluate the services of the SPCs. These two interests resulted in the researcher adopting two roles that were, at times, contradictory and dealing with this conflict of interest required compromise and had implications for the progression of the research.

### 2.2.3 Implications for the research

Early in the research, it became evident that the development of a generic model to evaluate each of the sports science support disciplines was an unrealistic undertaking for a PhD. Consequently, the research was narrowed to focus on sport psychology as this was the researcher's interest area. The applicability of the research findings to the other disciplines in the SPCs was considered and will be discussed in Chapter 12. However, the major focus of the thesis was on sport psychology and this narrowing of the research did not fit comfortably with the expectations of the ESCWM. Nevertheless, in order to accommodate the demands of a PhD, compromise was essential.

A further expectation of the research was that the empirical studies would be undertaken within the SPC, employing athletes from the regional sports science support programmes and SPC staff as subjects. This was the initial intention and in some instances (e.g. Section 7.2 and 9.1) this was possible. However, it became evident that the requirements of research were not always compatible with the work

of the SPCs. For example, a sport science project for a regional table tennis squad was planned for a three year period. The project took place in the first year of this thesis, however due to funding and governing body issues the project did not take place in the second or third year of the thesis. Fortunately, the table tennis players had not been recruited as subjects, however if they had been the consequences for the progression of this research would have been grave. It became evident that recruiting additional athletes from outside of the SPCs (e.g. Section 7.1 and 9.2) would enable the researcher to retain a level of control over athlete participation and ensure the required commitment necessary to undertake rigorous research.

Furthermore, changes in personnel in the SPCs had implications for the effective application of the research findings into the SPCs. A gradual integration of the evaluation model and instruments into the SPCs had been planned. However, numerous personnel changes ensured that this was not possible. In this situation it was necessary to deal with the changes as effectively as possible.

More generally, in order to fulfil the requirements of the ESCWM there was a need to shape the empirical research so that the model proposed and evaluative instruments developed would have applicability and generalisability to the work of the SPCs. Specifically, the research aimed to produce a model and instruments that would fit within a practical setting and provide useful evaluative information.

This aim had implications for the philosophical and methodological approaches adopted in both developing the actual instruments and testing them. As is evident from the empirical studies in Part III, an eclectic mix of methods was used in striving to fulfil this aim. Each individual section in Part III aimed to justify the methods and approaches employed. However in this section, it was useful to briefly consider recent discussions on philosophical and associated methodological approaches to research in order to justify the eclecticism evident throughout the thesis.

### 2.2.3.1 Philosophical and methodological approaches

Within sport psychology two broad philosophical approaches are evident; positivism and naturalism (Hardy *et al.*, 1996). Traditionally sport psychology has adopted a positivistic approach which argues that reality can be observed and reduced to individual constituent parts. The knower and the knowledge are independent and the challenge of positivistic science is to identify the parts of knowledge and their relationship to one another. From this, universal laws of knowledge can be developed. Although substantial knowledge has been gained by following this traditional scientific method, Martens (1987) argued that all questions of interest and importance to practising sport psychologists cannot be adequately answered within positivism.

There remained a need to better understand the behaviours and experiences of people in sport and Martens (1987) proposed what he termed a 'heuristic' alternative approach to research. Arguably, this heuristic approach incorporates the same fundamental assumptions as naturalism. In contrast with positivism, the naturalistic paradigm assumes that realities are holistic, created and multiple. Knowledge cannot be separated from the knower and in order to understand reality the researcher must get close to the person/ persons being studied.

Adoption of a philosophical approach influences how the researcher perceives the world and subsequently how they conduct research. Jackson (1995) suggested that a paradigm may be thought of as the researcher's spectacles, that is, different paradigms represent different ways of looking at an issue. Quantitative and qualitative methodologies can fit within each of these paradigms, however in sport psychology, quantitative methods have typically been associated with positivism and qualitative methods with naturalism (Hardy, *et al.*, 1996).

#### 2.2.3.2. Towards methodological appropriateness

Debate concerning which paradigm is most appropriate for sport psychology has been ongoing (Martens, 1987; Hardy *et al.*, 1996). However, it has recently been argued that this debate should come to an end (Patton, 1998). That is, it has been recognised that each approach has strengths and weaknesses and it is unlikely that one approach will eventually be judged correct and the other refuted (Hardy *et al.*, 1996). Instead, researchers should recognise the value of each and make responsible methodological decisions dependent on the purpose of their research (Patton, 1990). Undoubtedly there are situations and topics where a positivistic quantitative approach is called for and others where a naturalistic qualitative study is appropriate (Robson, 1993).

However, it is inappropriate to adhere dogmatically to a philosophical belief, but instead the researcher should strive to answer the research question using the most appropriate methods available.

This approach fits well with Bryman (1988) who argued that many of the differences between positivism and naturalism are in the minds of philosophers and theorists rather than in the practice of the researchers. By adopting this viewpoint and perceiving the differences between the traditions as technical (i.e. methodological) rather than philosophical, the researcher can '*mix and match*' methods according to what best fits the aims of a particular enquiry (Robson, 1993). Hardy *et al.* (1996) also encouraged researchers in sport psychology to adopt a range of methods within and across investigations.

The aim of this thesis was to develop a model and instruments to evaluate applied sport psychology practice that will have practical application and provide useful evaluative information. The instruments developed and methods employed to test them were used because they provided what was perceived to be the best approach available to achieving this aim. Throughout this thesis methodological appropriateness has superseded philosophical considerations and in Part III case studies, factor analysis, narratives and inductive content analysis were all employed in different studies. These methods are not normally reconciled because of their underlying philosophical associations, however it was argued that they were appropriate for the development and testing of the respective evaluative instruments and fulfilling the aims of the thesis.

### 2.2.3 Summary

This section has briefly highlighted issues that arose in this thesis as a result of joint funding and the need to fulfil the expectations and requirements of the collaborative institutions. As is evident, these issues over-arched the thesis and influenced the methodological decisions made.