



SCIENCE AND SKIING V

Edited by

Erich Müller
Stefan Lindinger
Thomas Stöggl

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Introduction

The Fifth International Congress on Science and Skiing was held at St. Christoph a. A., Tyrol, Austria. It was the follow up conference of three International Congresses on Skiing and Science, which were also held in St. Christoph a. A., Austria, in January 1996, in January 2000 and in December 2007 and of the International Congress on Science and Skiing, which was held in Aspen, Colorado, USA, in April 2004.

The conference was organized and hosted by the Department of Sport Science at the University of Salzburg, Austria, and by the Christian Doppler Laboratory “Biomechanics in Skiing”, Salzburg, Austria. It was also again part of the programmes of the steering group “Science in Skiing” of the World Commission of Sports Science.

The scientific programme offered a broad spectrum of current research work in Alpine and Nordic skiing and in snowboarding. The highlights of the congress were five keynote lectures. The scientific programme of the congress was completed by 2 work shops, 99 oral presentations and 66 poster presentations.

In the proceedings of this congress, three keynote lectures as well as most of the oral presentations are published. The manuscripts were subject to peer review and editorial judgement prior to acceptance.

We hope that these congress proceedings will again stimulate many of our colleagues throughout the world to enhance research in the field of skiing so that at the Sixth International Congress on Science and Skiing, which will be organized in the winter 2013/14, many new research projects will be presented.

*Erich Müller
Stefan Lindinger
Thomas Stöggl*

We would like to thank Elke Lindenhofer for the time and the enthusiasm she invested in the editing of this book.

Part One

Keynote Papers

Can a ban on doping in skiing be morally justified?

Loland S.

1 Introduction

As most other sports, skiing has had its doping cases with athletes using banned performance-enhancing means and methods. Cross country skiing has been particularly exposed, probably due to extensive possibilities of biomedical manipulation of a key quality in performance: endurance.

During the last two decades and with the 1999 establishment of the World Anti-doping Agency (WADA) as a decisive step, the struggle against doping has intensified and involves not just sport but also public authorities and governments. The struggle however is not without challenges. For instance, to draw the line between acceptable and non-acceptable performance-enhancing means and methods is a complex scientific and moral enterprise. Actually some scholars hold that the ban on doping in sport is problematic and even unjustifiable (Black & Pape 1997; Brown 1991; Tamburrini 2000; Savulescu et al 2004). And, as is evident from extensive doping cases, some athletes and coaches seem to accept and indeed practice doping (Waddington and Smith 2009).

What then are the core reasons to categorize and ban certain performance-enhancing means and methods as doping? With examples from skiing I will examine whether anti-doping can be properly justified from a moral point of view.

2 Methods

The approach is one of practical, normative ethics. I present a systematic and principled argument in which ethical dilemmas are examined on the background of relevant facts and examples. The approach is inspired by the methodology of reflective equilibrium as developed by John Rawls (1971). First, I will sketch how intuitively appealing arguments in support of the ban need