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Training practices and coaching philosophy of successful Norwegian national coaches in endurance sports

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#### **INTRODUCTION:**

While performance development in endurance sports typically is described by the interaction of loading factors such as training volume, frequency, and intensity distribution, practitioners themselves highlight indicators of training quality – the how and why – as the most important factors leading to success. In this context, successful coaches are highly systematic in collection of training data, and carefully experimental regarding training adjustments. Somewhat surprisingly, the practices, knowledge and experience of the very best coaches have received minimal systematic attention in research literature. The mysteries and secrets of the training process are challenging to quantify and require an integrative and multidisciplinary approach. Therefore, the aim of this study was to explore the training practices and coaching philosophy of successful coaches in endurance sports.

### **METHODS:**

Twelve male Norwegian coaches with a track record of coaching endurance world-class athletes (total of >320 Olympic, World and European Championship medals: mainly Norwegian athletes) in cross-country skiing. biathlon, speed skating, rowing, road cycling, swimming, long-distance running, and triathlon participated. Individual semi-structured interviews on planning, organization and periodization of training, competitive activity, training load and quality indicators, load monitoring, testing, and athlete follow-up provided approximately 180 min audio recording per respondent. The transcripts were approved by the respective coach, formally translated to English and analyzed thematically. **RESULTS:** 

#### Preliminary analyses reveal a high-volume approach, with the majority of training at low-intensity and with training volume and intensity distribution periodized using a traditional model as common features among the coaches' training philosophies. This includes 2-3 days (2-5 sessions) weekly as the cornerstones of the training program and that other training sessions are built around these. The key sessions become gradually more competition-specific in all characteristics towards the competition period. There are clear sport-specific differences in the training content, driven by differences in competition demands, mechanical and muscular load during specific training sessions, as well as access to facilities and environmental conditions. All coaches described that a coach-driven and athlete-centered coaching philosophy was essential to create trust, mutual understanding, and provided the foundation for optimizing the training process and execution of sessions for each athlete. The factors involved in this process will be described and discussed in the presentation. CONCLUSION:

This study presents a holistic picture of "state-of-the-art" endurance training, including novel qualitative information about training and coaching philosophies from successful Norwegian coaches in endurance sports.

Topic: **Training and Testing** 

Presentation

Oral

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