Wilson, Stuart
University of Ottawa
Bradley W. Young
Doctoral 2021

Revisiting Recovery: Defining recovery's meanings, modes, and management, from the perspective of elite endurance athletes

---

Training for sport performance relies on recovery, the process of restoring performance ability between training sessions (Kellmann et al., 2018). Effective recovery matches stress (e.g., training) to spur adaptation, while inadequate recovery allows stress to accumulate and lead to negative training outcomes (e.g., injury, overtraining, burnout). A better understanding of recovery can help address increasing rates of these negative training outcomes (e.g., Madigan et al., 2022) and improve sport experiences for any athlete training competitively.

Recovery is theoretically broad and complex, but research and practice have focused on areas of recovery monitoring (e.g., in relation to training load) and recovery modality use (e.g., ice baths, compression pants). However, monitoring describes recovery outcomes and not the processes used to achieve them, and modality use says more about an athlete's resources than their actions. Further, both these perspectives represent recovery as what practitioners 'apply' to athletes, framing the latter as a 'machines' to be tinkered with instead of active agents in their own recovery. One solution is to look at recovery as a skill; a property of the athlete that they can own, practice, and improve in pursuit of their sport goals. Sport performance and training are composed of many skills, but no sport research has explored recovery through this lens.

The purpose of my dissertation is to explore what it might mean for an athlete to be skilled at recovery, accomplished in two steps: Step 1 focused on understanding what recovery is and involves from the perspective of the athletes doing it, while Step 2 will involve comparing this new understanding with how athletes go about recovery during their regular training. This presentation will discuss the results of Step 1. I conducted two semi-structured interviews with each of thirteen elite Canadian endurance athletes (six women, seven men; aged 25-31 years; from nine sports), between which they kept a week-long activity journal of their recovery-related actions and thoughts. Each athlete had competed in multiple Olympics/World Championships (minimum one in the past two years), making them some of the country's top endurance athletes. I used three phases of thematic analyses to examine what recovery meant to the athletes, how they implemented it, and how their social and physical environments supported it.

First, the athletes described recovery as *potentially broad* while *situationally narrow*. Recovery encompassed a wide range of possible approaches spanning multiple dimensions, levels of focus (i.e., a focus dial), and personal solutions. Simultaneously, recovery was specific to the situation,

defined by what helped the athletes (a) absorb their past practice and prepare for the next one, (b) break from stress to engage in restoration, and (c) negotiate conflicting needs to prioritize net benefit. These results create an athlete-centered framework for describing recovery and suggest that recovery skill lies in sorting through the potential recovery approaches available at any time to identify and implement the right approach for a given situation.

Second, the athletes took primary responsibility for implementing recovery, and described doing so using three self-regulatory recovery skills: (1) 'know your body', including knowing your tendencies, needs, and plans for recovery; (2) 'listen to your body', involving the awareness and interpretation of your sensations of recovery/stress; and (3) 'respect your body', involving adjusting and/or adhering to recovery based on what you 'know' and 'hear'. A fourth theme—'learn your body'—described how the first three developed, representing how the athletes practised, honed, and mastered these skills of recovery self-regulation.

Third, the athletes' responsibilities in implementing recovery (i.e., recovery self-regulation skills) were supported by actors in their physical (e.g., home, training sites) and social environments (e.g., coaches, family), who served to regulate, facilitate, and provide recovery. 'Regulating' roles involved actors performing or supplementing athletes' recovery self-regulation (prompting, motivating, monitoring). 'Facilitating' roles involved creating conditions conducive to better athlete recovery (time, understanding, focus). 'Providing' roles involved supplying recovery, including specific experiences (e.g., enjoyment, connection) and resources or services (e.g., massage). These roles describe how even an athlete-driven view of recovery must be located within a supportive network of people, places, and things, designed to optimize the athletes' training experiences.

To summarize, Step 1 of my dissertation described how elite endurance athletes view recovery, laid out the skills they use to self-regulate it, and described how their social and physical environments could support them in pursuit of better recovery. This new understanding positions recovery as a skill that can be developed and valued by organizations as an athlete-driven tool for improving the sport experience of all those engaged in competitive training.