



**John Contreras** delves into his studies and key experiences and how they have transformed his sports and exercise physiotherapy practice.

## Bridging the gap

So, what do you do for a living? It seems like an innocent enough question designed to stimulate small talk. But for us physiotherapists, this innocuous question comes loaded with the fear of being asked for professional advice. My defence in this situation is to say that I am a project manager. It just so happens that the projects I manage involve injury recovery, return to sport and improved fitness, but no one ever asks. Thinking back, there have been a few key episodes that have shaped my development into a Pilates/strength and conditioning physiotherapist. My aim is to outline some of the key experiences that have influenced my development into my exercise-centred clinical practice.

### **On being a student**

Before physiotherapy, I was studying science and fascinated by exercise physiology. Wanting to see the science of exercise up close led me to physiotherapy. Despite the wealth of material covered, my interest in exercise never seemed adequately addressed. In my final year, and motivated to gain further insight into strength training, I reached out to various physiotherapists and soon found myself with a position at the Victorian Soccer Federation.

### **On being a jack of all trades and master of none**

Given carte blanche with my job description, warm ups, cool downs, recovery sessions, on-field rehabilitation, nutritional advice and designing strength training programs were just some of the tasks I delivered. Overwhelmed, I contacted a Victorian Institute of Sport sports scientist and spent time picking her brain about concepts outside the scope of physiotherapy. Learning about strength and conditioning was motivating and a light was shone on the type of physiotherapist I wanted to be. I was enthused by the idea of working within a space that bridged injury management and high-performance training. Nevertheless, I was under no illusion that achieving this would take a lot of work.

### **On being a gym junkie**

When I moved to London, I left physiotherapy and worked as a personal trainer for 18 months. It was a wonderful experience for many reasons. I worked alongside trainers who thought differently and challenged my beliefs. When I arrived at the gym, I was proud of my ability to push patients forward with their rehabilitation and thought I was quite progressive in nature as a physio. In contrast, my personal trainer colleagues thought otherwise. They saw me as conservative, fear avoidant towards many exercises and pessimistic with regards to a client's potential, but at least on a positive note they accepted that my anatomy knowledge was pretty good. This contrast in approach highlighted the two ends of a spectrum that I wished to span. I had to re-evaluate my approach and think as a fitness professional, so I changed my tactic to assessing clients considering what they could do, rather than what they couldn't. I held back highlighting deficiencies and praised a client's accomplishments. This 'new' approach seemed logical, but as a physio I was trained to see problems, and unfortunately I had trained a lot. With no injury or pain present, my program goals were directed to performance measures rather than the reduction of symptoms. As a young clinician in an unusual environment, this was mind-blowing. I was ready to return to physiotherapy with a new approach.

### **On exploring the unstable theory of Pilates**

It was also during this time I was introduced to Pilates by a personal trainer colleague, and from the start, I was encouraged to view Pilates as a facet of strength and conditioning. Having returned to physiotherapy with the assumption that many patients were simply deconditioned, I initially used Pilates as a starting point to build fitness. Although this was a simplistic view, the concept continued to frame my approach for some time and I soon started working with a provider of Pilates courses. As I began teaching other physiotherapists, I sought to read every possible paper on core



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stability and motor control. I figured teaching would be an effective way to gain a thorough understanding of how physiotherapy can best use Pilates. Considering the changing evidence base, I organised my thoughts about the who, what, where, when and why of each exercise. Using my teaching role as a means to evaluate my clinical approach to Pilates and exercise, I found it a challenge to reconcile the core stability model with my growing appreciation of the biopsychosocial model. As such, I evolved my Pilates practice to reflect the shift away from a biomechanical paradigm. If anything, I am adamant that Pilates-based exercise has a key part to play in physiotherapy, though perhaps not for the reasons we held at the turn of the century.

#### **On being an academic gym junkie**

When I enrolled into a Master of Exercise Science (Strength and Conditioning), I felt as though I had to defend my decision. Well-meaning colleagues would ask why I wasn't doing a sports master's. I wanted to learn about the high-performance environment I was guiding patients towards. Considering I had little idea of what constituted power training, the components of agility, periodisation or the biomechanics of Olympic lifting, the exercise science course looked ideal. Two years later I was a strength and conditioning coach. The most valuable skill I acquired during these studies was the ability to evaluate the external validity of the strength training papers with healthy, trained subjects. If anything, it provided a clearer awareness of what constituted athletic performance. I now felt I was better placed to design end-stage patient programs.

#### **On returning to physio**

Following my exercise science studies, I often found myself drifting too far towards the realm of a strength and conditioning coach or Pilates instructor and progressing programs for the sake of progress. The fitness fallacy that strength training heals all was

one I had to consciously avoid pursuing. I was also aware that my understanding of acute injury management needed an upgrade. Wanting to principally operate as a physiotherapist, I decided to add to my HECS debt and took on a Master of Sports Physiotherapy. It was a great experience that introduced me to many like-minded colleagues and also consolidated my thoughts on the role of Pilates and strength training in physiotherapy. I had a good idea of what a strength or Pilates program should look like. Now as a sports physiotherapist, I had a clearer understanding of the initial injury management needed to fill the space between injury management and performance training. It was during this time I started to see my role more akin to that of a coach rather than a therapist.

#### **On project managing patients**

I now think of exercise differently. I once viewed exercise through the prism of biomechanics, force output and EMG signals. Pain science, neuroplasticity, behavioural science, cognitive learning and, crucially, the patient are now part of the equation. Having a large collection of exercises and training methods up my sleeve are helpful, but only when deployed within the context of the patient's specific clinical needs. My education and clinical experience have facilitated my awareness of all the various components required to guide a patient from first contact to return to activity. The challenge is to keep on top of the various components needed for a successful outcome and why I now see my job as having developed from physiotherapist to project manager.

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