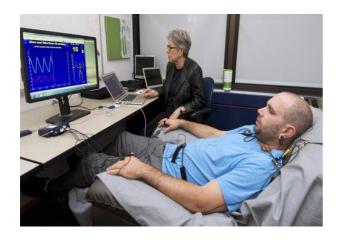
Manuel Osborne-Paradis et le Biofeedback et Neurofeedback

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Références directes au biofeedback et au neurofeedback en surbrillance jaune.



Manny Osborne-Paradis, right, doing mental strength training with Dr. Penny Werthner, Dean of Kinesiology at the University of Calgary. (Larry MacDougal For The Globe and Mail)

(... 2014)

Physically, he is fine. He has recovered from the 2011 crash in Chamonix, France, that broke his left leg, tore up his left knee and cost him almost two seasons. Therapy and conditioning have brought him to a level where, at 29, he is near the peak of health.

But to get better and improve on his racing, **Osborne-Paradis** decided there were other things he could do, such as hone his mental edges. That pursuit took him to Werthner, a sports psychologist and former Olympic runner, whose **biofeedback** and **neurofeedback** sessions help athletes learn how to calm themselves so they can let their physical training take over and compete efficiently.

Werthner has worked with dozens of athletes, including curler **Cheryl Bernard** and moguls skier **Alexandre Bilodeau**, who won silver and gold, respectively, at the 2010 Vancouver Olympics, along with other medal winners from the 2012 London Summer Games.

Much of what Werthner heard from athletes was how they were too anxious, too overwhelmed before a major competition. They had spent so much energy worrying about an Olympics they were exhausted before they got there.

Werthner's work is about "enabling the athletes to learn how to self-regulate themselves both physiologically and neurologically. It's like training the brain the way you train the muscles in the body. Manny has been really open-minded about this, and good to work with."

Osborne-Paradis was keen to reset himself after the Vancouver Games. Considering how well he had done in 2009, winning three World Cup races and finishing third in another, considering the Olympic downhill was being staged on his home mountain, Osborne-Paradis was elevated by fans and media to sure medal status. His Canadian teammates experienced similar expectations. They didn't live up to them; Osborne-Paradis finished a disappointing 17th in the downhill.

Then came the leg-wrecking crash in France followed by a silly incident during the 2011 Calgary Stampede, where Manny, being good-time Manny, tried to hitch a ride on the back of a party bus, only to be dragged almost 80 metres. That put him in a hospital with a bad case of road rash. It was time to rethink things.

"Part of my M.O. is to be the fun-loving guy, but as you get older you don't have the energy to be that guy all the time. I'm not 20 any more," he says.

The measure of his physical comeback came this past March in Kvitfjell, Norway, where Osborne-Paradis turned in a resounding fourth-place showing. For the 2013-14 Olympic buildup, he vowed to explore every option, renting a private lane on a Whistler ski run for three days for himself and coach Stefan Guay.

There was also an early trip to Switzerland so he could train in the Alps with the French national team. That was before he headed to France to attend a training camp with his Canadian teammates.

It was enough for Martin Rufener, Alpine Canada's new head coach, to remark recently: "You can just tell that his mental focus and mental strength is there and that's important."

Alpine Canada knew of Werthner's skill in dealing with world-class athletes and asked to be part of her program. Osborne-Paradis was keen to see what could be done. The idea, he was told, was to train his mind so he could "stay in the moment" for two minutes, the average length of a men's downhill.

The first few hour-long sessions didn't seem to accomplish much. During the tests, sensors monitor his heart rate, its variability, his peripheral body temperature and his skin conductance, how much he sweats, a sign Osborne-Paradis is engaged both physiologically and psychologically.

Eventually, Osborne-Paradis learned how to co-ordinate his breathing, how to relax his muscles to keep them from getting too tense – and also how to crystallize his thoughts. Seeing the results on a computer screen has given him the tools and confidence he will carry over to the mountains.

Exemple d'entraînement neurofeedback (ci-dessous)

"The game with the sailboats, you think about something else, your boat stops and another sailboat moves. The other boat is another part of your brain and you have to regain your composure," he explains. "It's like in a race, where there's music playing [over loudspeakers]. You hear athletes say later that they never heard any music because they were so into their race, in the zone. You need that in skiing. It's about not getting too overzealous in what's going on until you're at the finish.

"You have to learn where to go in your head."

Osborne-Paradis's head is a comfortable place for him to be, although the work continues. Before leaving for Sochi, he and Werthner hope to have another four or five sessions. The next step will be having Osborne-Paradis visualize the course in Sochi's Rosa Khutor alpine resort and racing it in his mind.

"What I told Manny was that physical preparation and technical preparation is No. 1 in any sport. If you don't do that it doesn't matter what else you do," Werthner says. "But then if you do that and stay healthy, then how you can manage yourself on competition day is really what separates the people who win and the people who don't win." (...) »