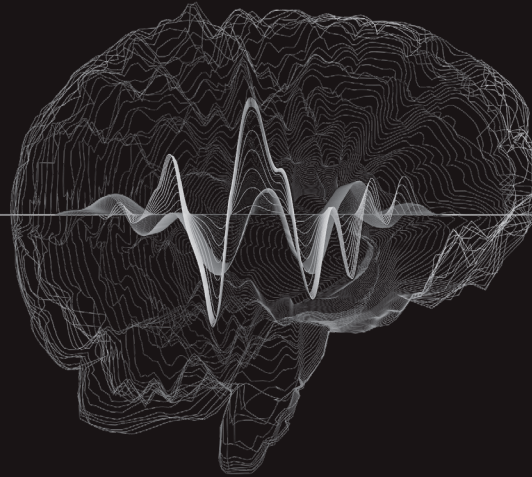


CODES

POWER PLAY

Can music boost performance? A collaboration between Optus and Samsung created athlete anthems to test the theory. By Victoria Baker.



We all know intuitively that music can change our mood, lift us up, push us forward. Everyone has a song they listen to for extra motivation. For Melissa Hopkins, vice president, marketing at Optus, it's *Bulletproof* by La Roux. "The first verse – 'Been there, done that, messed around, I'm having fun, don't put me down. I'll never let you sweep me off my feet' – is my mantra," she says.

But what if your motivational tune took into account your favourite artist, the tempo of your exercise, and even your affirmations? This was the concept behind a recent collaboration. "Together with Samsung, we came up with a creative idea that brought together award-winning musicians, sport scientists and audio engineers to create bespoke tracks to enhance the performance of these amazing athletes for their time in Tokyo and beyond," says Hopkins.

For Ralph van Dijk and Ramesh Sathiah, co-creative directors and founders of sound design business Resonance Sonic Branding, working with athletes was an intriguing experience. "The thing that became really interesting was understanding that music affects everybody completely differently," says Sathiah. "There isn't one thing that will make everybody feel good – it comes down to how people have connections with styles they love, which comes down to their personal history and memories."

In her interview with van Dijk and Sathiah, skateboarder and Optus Olympic ambassador Poppy Starr Olsen mentioned an affinity with Sydney musician Alex The Astronaut. "One of my favourite songs of hers is *Not Worth Hiding*; it helped me come out and be happy with myself and it was a big part of my life," says Olsen. So it felt special when Alex The Astronaut performed her personal track entitled *Send It*. For the artist, the project was "awesome". "I obviously love sport, I studied physics at uni so science is a big thing, and now I'm a musician, so it was the perfect three interests in one," she says.

Matildas vice-captain and Optus Olympic ambassador Steph Catley wanted her song, recorded by Brisbane band Sheppard, to focus on belief. "I've been through a lot of ups and downs and injuries but the main thing I've always come back to is that if I believe in myself enough, I'm capable of anything," she says.

Physicist and peak performance expert Dr Damien Lafont was part of the team, tasked with making the link between music and

science. "In the science of high performance, whether in sport or music, it's accepted that your brain needs to have synchronisation between its right and left sides, and less activity in the pre-frontal cortex, which is about thinking and analysing," says Lafont. "Athletes have routines prior to competing, to quiet their minds, to remove external stress and make sure they are focused. If they think too much, worry and doubt will creep in. The idea of this music was to help to trigger this brain state."

Ultimately, this is what many athletes refer to as a 'flow state' or 'being in the zone' and which Lafont describes as a "spike of alpha brainwaves". "It doesn't refer to a passive or meditative state – an athlete can be active but have an inner peace, and trust their body to do what it has trained to do," he says. "When you are in this state, you have access to your subconscious so you can learn and perform faster."

Van Dijk and Sathiah incorporated binaural beats and isochronic tones into each track as a form of brain entrainment. "The rhythms and the patterns of the pulses and the beats are something we don't notice consciously but our brain has to work harder to process them, and that action gives us a more focused mindset because it keeps the distractions around us at bay," explains van Dijk.

Apart from the technical elements, it was the emotional personalisation that made each track truly individual, from incorporating a sample of the Matildas singing their team song into Catley's track to personal mantras into others. "We combined the science with the art so each person had a real emotional connection to their song," says van Dijk. "Athletes are so in tune with thinking about their mindset, there is a real understanding that mental state can be the difference between winning and losing, because everybody is at an extremely high physical level," says Sathiah.

Olsen uses music to block out external pressures. "Putting music on really loud can block everything out and you can skate without thinking too much about what you're doing," she explains. "Music is such a massive part of the pre-game in the change room and being together and getting each other excited for the game and pumped to go out and play," adds Catley. When she first heard her personal track, she had goosebumps. "I loved the song straightaway and knew that it would be something I'd listen to on game day. Now I've got a song that I can keep forever that will remind me of the Olympics."

Performance Enhancing Music by Samsung Olympics is available on Spotify.