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Hopes pinned on genetically gifted among cookie-cutter athletes

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Humans are constantly evolving but a lack of progress in track and field athletics has a WA sports science expert asking why we're not getting any better as the Olympics in Rio de Janeiro enters its second week.

Curtin University School of Physiotherapy and Exercise Science research director Kevin Netto has examined how performance of elite track and field athletes has evolved over time, and he found there hasn't been much progress.

Of the 36 track and field world records A/Prof Netto scrutinised, only six were made after 2010—the oldest made in 1983.

"The fact of the matter is, the numbers give us a really damning statistic of we're actually in decline rather than athletically on the rise," A/Prof Netto says.

He hypothesises this is due to three main factors: as a human race we are becoming weaker or that athletes have been so dependent on performance enhancing drugs that the records are unattainable.

His third theory is that would-be athletes are turning to professional sport rather than competing in Olympic Games.

A/Prof Netto says figures from a recent grip strength test, which measures the strength of the hand and forearm and therefore indicates overall strength, is a good marker for how far we've come.

The test shows 20-25 year olds were 40 per cent weaker in grip strength than the same age group ten years ago.

"It's sort of like natural selection telling us that our top line athletes will never be as good as what has been," he says.

But what has changed in the way athletes prepare for games?

A/Prof Netto believes advances in technology are improving the way track and field competitors ready themselves.

For example, the Australian hockey team spent two sessions over a period of six weeks in a climate chamber to help them acclimate to Rio's conditions.

However, he admits the cookie-cutter approach to athlete preparation could prove ineffective for the "homogenous" group of athletes.

"Now we're really only looking for the genetic mutant—the one that's completely genetically gifted to come out of that mould," A/Prof Netto says.

"Usain Bolt is a fantastic example of an anomaly to what's going on, but even his records—100m records—are something like five or six years old already."

Has dependency on drugs made breaking world records unachievable?

A/Prof Netto uses former sprinter Ben Johnson and his record-setting 100m race as an example.

"He ran 9.79 in 1988 but was then caught for steroids."

It was 20 years later when the Olympic record for the men's 100m event cleared Johnson's time of 9.79—Usain Bolt running the race in 9.69 seconds.

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