

Women in sport

How much sport research is specific to females?

Emma Ross:

When we look at sport and exercise science research, one of the most surprising bits of data that we see is how little research is actually done on women. So when you look at research that's done exclusively on females, in 2015, a survey was done that found only 4% of the research done in the top three sport and exercise science journals was done exclusively on females. And that means that things like the menstrual cycle, and breast health, and pelvic health, and injury in women, that's exclusive to females. And only 4% of the research was being done in those areas.

Now we've just done a survey from 2016 to 2020 to see whether the dial has moved at all and actually, it has, but the bad news is very little. So only 6% of research is currently done exclusively on females when you look at sport and exercise science. So when we look at that 6%, it's not that the other 94% is done exclusively on males, there is a body of research that's done using males and females together in the experiments and the data collection. But unfortunately, that research doesn't well it doesn't serve anyone very well but particularly it doesn't serve females particularly well.

Because it's not taking into account something like the menstrual cycle, which is where a female's physiology is going to change as her hormones fluctuate across the cycle. And if you're not controlling for that as part of your experiment, then the outcomes really aren't particularly useful. Now, if the researchers have been quite diligent and they are controlling for the time of the menstrual cycle and the female participants, what they tend to do is study the females when their cycle hormones, that's oestrogen and progesterone, are at the lowest at the beginning of the cycle. Now that's when females most closely resemble males. And so again, the outcomes aren't particularly useful when we're trying to design training and coaching strategies for female athletes.