

Biomechanics of skilled cricket batsmen

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Though the discovery might have come too late to help Australia win this week's Second Test match, a team of scientists from Down Under has revealed what techniques give skilled batsmen an edge over their less able teammates – and opponents.

Hitting a [cricket ball](#): what components of the interceptive action are most linked to expertise?

Using two groups of adult male cricketers (one drawn from national and state sides and the other from local competitions), a ball-projecting machine, bats of different widths and some high-tech recording devices, researchers studied the batsmen's movements and timing.

Writing in the journal *Sports Biomechanics*, Juanita R. Weissensteiner and her colleagues conclude that timing seems to be what sets the batsmen apart. They noted that the highly skilled players initiated and completed their front-foot strides earlier, timed the completion of the front-foot stride to coincide with the start of the downswing, and timed the downswing well in relation to the bounce of the ball.

They write: "The highly skilled batsmen featured in this study were distinguishable by their ability to time their front-foot stride and swing relative to the specific temporal and spatial demands imposed by the incoming delivery, in particular the time and position of ball bounce. Timing interception close to ball bounce was strongly associated with the level of technical performance achieved on the task."

However, their study did bowl at least one googly that went against their original hypothesis: highly skilled batsmen were no more accurate than the mere mortals when the size of the bat was reduced to a third.

In addition to giving insight into how adult cricketers hit the ball in different ways and with different levels of success, this study also raises questions about how these skills develop and at what age, how much they depend on an individual's physical characteristics and/or dedication to practice, and how cricket coaching can be made most effective. Sadly, the answers to those questions are unlikely to be found in time to make sure England holds on to the Ashes in the New Year.

More information: "Hitting a cricket ball: what components of the interceptive action are most linked to expertise?" Juanita R.

Weissensteiner et al. *Sports Biomechanics*, Volume 10, Issue 4, 2011.

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