

# A CONSTRAINTS-LED INTERVENTION TO ASSIST WITH THE DEVELOPMENT OF TECHNICAL SKILL IN ADOLESCENT CRICKET BATSMEN

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## What is the problem and what is known about it so far?

Traditional net practice is the basic foundation for cricket training across all age groups. Although net practices have a high level of functionality, the action fidelity of the training environment is low. What this means is that the perception-action coupling between batsman and bowler is well represented of a real performance environment, but the representative of the task environment is not similar to the real performance environment.

This translates to a lack of fundamental constraints that are missing from these training sessions and which may play a major role in the decision-making and execution of cricket strokes.

## Why did the researchers do this particular study?

The researcher set out to investigate whether a training environment with a greater representation of the real performance environment, with the constraints associated with real match play, could further assist the development of technical skill in adolescent cricket batsmen.

## Who was studied?

Twenty-three male adolescent cricket batsmen within the u15 age group participated in this study. Four school teams were sourced, with six batsmen from each school participating in the study. Two school teams (twelve batsmen) were assigned each to the control and experimental groups.

## How was the study done?

The experimental group was required to perform one training intervention session a week whereby they were encouraged to manipulate the ball around the field to specific target areas. These target areas represented gaps between fielders.

These training interventions took place on a middle pitch, with a metre-high net encircling the thirty-yard circle. Four targets areas were placed on the off-side, with another four target areas placed on the leg-side. These target areas were manipulated during and across sessions to encourage further manipulation of the cricket ball.

To determine a change in performance, each participant was required to perform a batting skills protocol aimed to evaluate the technical ability of the individual. This was performed before the intervention took place (pre-intervention) as well as after the completion of the intervention period (post-intervention).

## What did the researchers find?

There was no difference in technical skill performance between the control and experimental groups. The batting intervention did not further assist batsmen with the development of technical skill in comparison to traditional net practices.

With that said, mention should also be made to the limitations of the study design which could provide reason for the outcome of the study. Half of the control group dropped out of the study before performing the post-intervention measure. Due to time and weather constraints, the number of intervention sessions afforded to the experimental group was less than half the original stipulated amount ( $n = 8$ ).

## What are the implications of the study?

There were a number of methodological flaws within the study which compromised the efficacy of the training intervention. A major reason no difference was seen in the results was because of the limited intervention sessions that were afforded to the experimental group. Future research should allow for a greater sample size and for a greater period of intervention, therefore allowing the experimental group exposure to more intervention sessions.



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