



EFFECT OF ONLINE CRICKET COACHING PROGRAMME ON BATTING TECHNIQUE AT MSDHONI CRICKET ACADEMY

Satrajit Lahiri¹,
Abhijit Thander²ⁱ

¹Level-C, NCA, BCCI and LEVEL-III England & Wales Cricket Board,
Former visiting faculty of Coaches Education Course of NCA,
BCCI & Chief Coach of MS Dhoni Cricket Academy,
India

²Assistant Professor, Dr., Sports Technology Laboratory,
Department of Physical Education & Sport Science,
Visva-Bharati University,
India

Abstract:

Online cricket coaching and Education the programme has recently gained popularity during this pandemic situation in cricket due to the advances in technological and methodological approaches. That's why MS Dhoni Cricket Academy (MSDCA) has launched an Online Coaching programme (OCP) in Cricket for the budding Cricketers. The purpose of the study was to investigate the effect of a 4-week online coaching programme on batting setup and front foot shots compared to a control intervention. Ten (10) players were randomly selected from different batches as per their stage who enrolled in the Ms Dhoni Cricket Academy. These players were under the experimental group. The researchers have selected cricket players of Bolpur, Santiniketan as a control group who have not undergone any coaching programme during the lockdown period. The experimental, and control group were pre and post-tested through video analysis and subjective rating form prepared by the Chief Coach of MSDCA on batting setup (grip, stance & backlift) and front foot drive. The analysis showed the experimental group significantly improved from pre- to post-test, whereas the Control group showed no significant improvement. It was concluded that the Online coaching module of MSDCA implemented was able to improve the batting set-up as well as front foot drive which is effective for online coaching programme in cricket. This supports suggestions that batting technique can improve through Online coaching programme. The improvement in cricket batting technique experimented in this study suggests that improvement in batting technique might have positive effect 'on-field' improvement in batting performance.

ⁱ Correspondence: email satrajit26@yahoo.co.in, abhijit.thander@visva-bharati.ac.in

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1. Introduction

It becomes a major problem that the Covid-19 pandemic has brought the cricketing talents to a shuddering halt. As we all know that in India, the lockdown and its longer-term implications threaten the future of young budding cricketers who are the future of Indian cricket. Online cricket coaching programme (OCP) has recently gained popularity in the field of cricket because of the development of technology and methodological approaches in coaching. However, limited information are available about the scientific effectiveness of OCP. Furthermore, the scientific literature is still not in agreement on the effectiveness of online coaching programme and/or any differences existing between and within sports persons.

However some studies are available on visual training where Wimshurst Z. L. et al., 2018 investigated the effect of visual training on visual and cricket skills compared to a control intervention where 24 male county cricket players were pre- and post-tested on fourteen visual and seven cricket tasks. The result of the study showed that all the experimental groups were significantly improved from pre- to post-test, as compared to the Control group who shows no significant improvement. In another study Calder, S. L., 1999 conducted a study on specific visual skills training the programme improves field hockey performance where two types of visual training the programme were implemented namely visual skills training programme on a group and 'sport-specific visual awareness coaching' to another group. The results showed that the sport-specific visual awareness coaching group improved 12 basic hockey skill as compared to the other groups.

April 11, 2020, Hindustan times reported that Dhoni will facilitate online cricket coaching amid lockdown where the chief coach of MSDCA Mr Lahiri said that *"they will use an app 'Cricketer' wherein they upload their demo drills he also added that during the coaching programme the trainees also need to upload their videos so that the experts of MSDCA can keep a tab on their activities and feedback will be given accordingly."*

According to a report in Times of India, the MS Dhoni Cricket Academy offered live classes on Facebook for its trainees over the past one week to create interest and to motivate the young budding cricketers of India where Mr. Satrajit Lahiri, chief coach of the Dhoni academy, says that each video session posted by them is bringing close to 10,000 views across social platforms. During the ongoing lockdown and the need for cricket coaching, the former Indian captain M.S. Dhoni decided to facilitate online cricket coaching programmes through MSDCA along with AARKA sports and Cricketer AAP from the beginner to the transitional and senior stage, which was started from 4th July 2020.

Due to the lack of studies related to the online cricket coaching programme and its positive effects on batting technique, this study was also tried to investigate the effect of

4 week online coaching programme on batting setup and front foot shots compared to a control group intervention of different stages of cricket players.

It was hypothesized that the batsmen undergoing online cricket coaching programme would show greater improvement on batting technique than those undergoing a control intervention.

2. Material and Methods

2.1 Participants

Ten (10) players were randomly selected from different batches as per their age (mean age of 11.5 ± 5.73 years) and stage who enrolled in the Ms Dhoni Cricket Academy. These players were under the experimental group. The researchers have selected players of Bolpur, Santiniketan (mean age of 11.87 ± 5.25) as control group who have not undergone any coaching programme during the lockdown period.

2.2 Design

Each participant underwent pre-testing on batting technique on the first day during their first exposure on the online platform. They then undertook four-weeks of online coaching programme where the batsmen practised various drills on batting setup (Grip, Stance and Backlift) and front- foot drive and were then post-tested on batting technique.

During the course of the four weeks, each player carried out their coaching for one hour two sessions per week under the supervision for four qualified coaches of MSDCA.

2.3 Data Collection

Data were collected through Subjective rating forms video analysis and subjective rating form prepared by the Chief Coach of MSDCA on batting setup (grip, stance & backlift) and front foot drive.

Three Experienced and cricket specialised coaches and experts of MSDCA and Bolpur Santiniketan were rated the videos of the players as per the batting technique performed by the batsmen of experimental and control group respectively.

2.4 Batting Drills

For an effective coaching session and for the development of the batting technique the following batting drills were used:

A. Batting Set-up

a. Grip

- Two types of batting grip drill.

b. Stance

- Stance in three counts,
- Stance in four counts.

c. Back-lift

- One hand pick-up;
- One hand pick-up and one hand drive;
- One hand pick-up and two hand drive;
- Two hand pick-up;
- Two hand pick-up and two hand drive.

B. Front Foot drive (FF Drive)

- FF Drive shadow drill;
- FF Drive with stationary ball drill;
- FF Drive with drop ball drill;
- FF Drive with chin drop ball drill;
- FF Drive with moving ball drill (with partner/against the wall).

2.5 Coaching module/ protocols – Experimental intervention group

A standard coaching module prepared by Mr Satrajit Lahiri, Chief Coach, MSDCA was followed during the experimental period, the module is as follows

- A coordinator and a demonstrator for each group was selected;
- Coordinator's role is to introduce, instruct, observe, coach & run the show;
- Demonstrator's role is to do the demonstration of skills as advised by the coordinator;
- All other coaches will observe their respective player as allotted by the coordinator;
- Introduction of coaches/students/ about what students will expect from this course (only 1st day of any fresh batch) also to remind about using hand sanitizer time to time & keep water bottles close by.
- Followed by warm up by a trainer/coach (demonstrator);
- Skill session starts with the quick introduction of skill/skills;
- Followed by the demonstration of skill by demonstrator;
- Students to practice that skills for at least 7 to 8 minutes;
- All coaches to observe their respective students and inform the coordinator via chatting about player's areas to be worked upon;
- After 7 to 8 minutes all students to be asked to come closer to the screen and instructed accordingly one by one by the coordinator so that there is no confusion among each other;
- Then the practice starts again;
- Coordinator to ensure that information overload should not happen;
- Proper water breaks to be given;
- The session warm down & followed by summarization will end the session.

After the online cricket coaching of each day the players were motivated to practice the drills at their home by following the drills prepared by the qualified coaches of MSDCA given in the Cricketer AAP and the trainees were also asked to upload their

batting videos so that the experts of MSDCA can keep a tab on their activities and feedback was given accordingly as per the error for rectifications.

2.6 Coaching module/ protocols – Control intervention group

No specific coaching intervention programme was given to the control group.

2.7 Criterion Measure and Scores of Subjects on cricket Shot

The technique of Set-up and Front foot drive in batting of each selected subjects were used as the criterion measures for the purpose of the present study. The techniques of the subjects were assessed by three judges from MSDCA and Bolpur Santiniketan separately for both the groups. Qualitative Video analysis was done on the batting technique.

The batting technique was rated out of 10 marks on the basis of the following criteria:

A. Set-up:

- a. Grip: 2.5 points;
- b. Stance: 2.5 points;
- c. Back-lift: 2.5 points;

B. Front foot drive: 2.5 points.

2.8 Statistical procedures

Descriptive statistics were used to define the outcomes in each group. Percentage graph was used to show the improvements if any. Within the group, the comparison was made with the paired t-test. Intergroup comparison was made by unpaired t-test. P-value <0.05 was considered significant for this study. The level of significance was set at 0.05.

3. Results and Discussion

Table 1: Mean Standard Deviation and P Value of Batting Technique of Experimental and Control Group Before and After the Online Coaching Programme

Sl.No	Groups	Pre-analysis Rating Score Mean±SD	Post-analysis rating Score Mean±SD	Percentage of Improvement	t-Value
1	Experimental Group	4.672±0.115	5.793±0.114	23.99%	8.474*
2	Control Group	4.777±0.068	4.811±0.143	0.007%	0.293

*Significant at 0.05 level (t=4.30)

Table 1 show the mean difference of the pre and post-analysis rating score of batting technique of the experimental and control group, where it was indicated that the mean pre-analysis rating score of experimental and control group were scored 4.672 and 4.777 respectively however the mean of post-analysis rating score of the experimental and control group were 5.793 and 4.811 respectively. The table also shows that the rate of percentage of improvement was found 23.99 for experimental group and 0.007 for control group.

Further, the table shows that statistically significant improvement ($t=8.474$) was found when the pre and post-analysis rating score of the experimental group was compared.

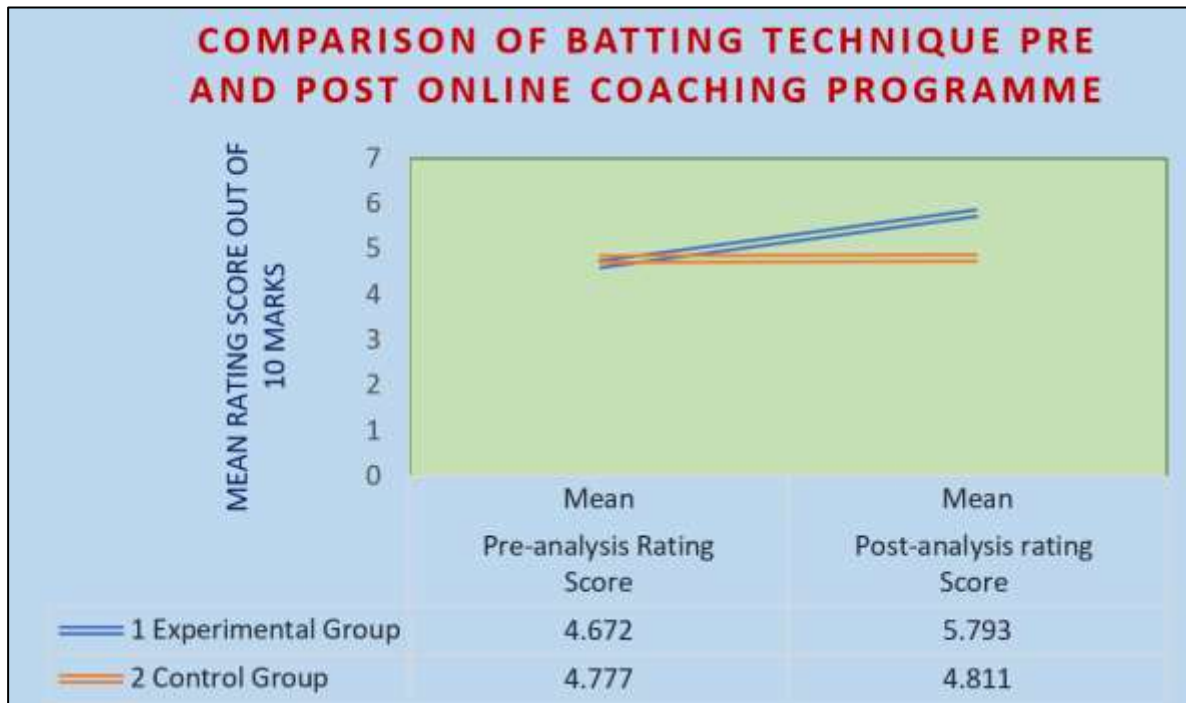


Figure 1: Graphical Representation of Batting Technique of Experimental and Control Group Before and After the Online Coaching Programme

Table 2: The Comparison of Batting Technique Between the Experimental and Control Group after the Online Coaching Programme

Sl.No	Category	Experimental Group Mean±SD	Control group Mean±SD	t-Value
1	Coached	5.793±0.114	4.811±0.143	7.583*

*Significant at 0.05 level ($t=2.77$)

Table 2 shows the mean difference of the post analysis rating score of batting technique of the experimental and control group, where it was indicated that the mean post-analysis rating score of the experimental and the control group were 5.793 and 4.811 respectively.

Further, the table shows that statistically significant difference ($t=7.583$) was found when the post-analysis rating score of the experimental and control group were compared.

3.1 Video Analysis report of pre and post-coaching programme effect

As per the result of the study, 23.99 % improvement of the batting technique of the experimental group was observed who were under the online coaching programme of MSDCA, on the basis of the result qualitative video analysis report of the batting skills was made to understand the actual result and the following observations were found.

3.2 Pre-coaching programme analysis

a. Grip

From the videos of the selected players of different stages it was observed that in grip, 3 players V's were not in line, 2 players gripped the bat near the bottom & V's were also not in line, 1 player gripped the bat near the bottom, 2 players grip were correct & 1 player v's were also not in line & there was a gap between the both hands.

b. Stance

In stance position 4 players were found bent knees, 4 players had an upright stance, 2 players have the error of toes, not inline & 1 player had a correct stance.

c. Bat back lift

During back lift it was found that 5 players had lifted the bat using bottom hand, 2 had prepositioned bat back lift, 1 player, had late bat back lift & 1 player had lifted the bat using bottom hand & also had prepositioned bat back lift.

d. Impact

While moving towards front foot drive during impact it was observed that 2 players had an impact with the closed face of the bat, 2 players had an impact with the open face of the bat, 1 player had an impact with a full face of the bat, 1 player did not have efficient transfer of body weight at impact, 1 player had an impact away from head, 1 player had back leg bent & handle of the bat behind toe of the bat at impact & 1 player had bat behind the front pad while playing front foot defence.

3.3 Post coaching programme analysis

a. Grip

It was observed in the grip that 5 players grip were correct, 2 players V's were not in line & 2 players held the bat near the bottom & V's were also not in line.

b. Stance

It was observed in stance, 5 players had a correct stance, 3 players had knees bent in stance & 1 player had upright stance & also toes not inline

c. Bat back lift

It was observed in bat back lift 4 players had a correct back lift, 3 players had lifted the bat using bottom hand & had prepositioned bat back lift & 2 players had lifted the bat using bottom hand.

d. Impact

It was observed, 6 players had an impact with a full face of the bat, 1 player had an impact with a full face of the bat & better transfer of body weight than before, 1 player had an impact with the full face of the bat but the transfer of body weight was not efficient, 1 player had an impact with a full face of the bat & also toe of the bat was behind the handle & 1 player had an impact with the closed face of the bat.

4. Discussion

The hypotheses which have been formulated in this study has been accepted as the result of the present study shows 23.99 % of improvement on batting technique of the players under online coaching programme than those who undergoing a control intervention. The results of the present study are in agreement with the findings of Wimshurst, Z. L. 2018; Kofsky and Starfield, 1989 and Quevedo et al. 1995, 1999 where all the researchers used skilled players in their training regime and found improvements in sport-specific ability. In the present study batting skills may be improved through many repetitions of training (Fujita, M., et al., 2002; Long, G. M., et al., 1991) and the online coaching module used in the present study was very effective to improve the batting technique.

It is therefore suggested that at the beginners to transition and senior-level technical abilities may not be considered as a limiting factor in preventing good batting performance. In contrast, Abernethy and Wood (2001) concluded that no improvements were observed after a generalized programme on visual skills or tennis skills, the result may be due to their participants were all novices and had little or no tennis experience.

However, further studies are needed not only to verify the effectiveness of the online coaching programme in other skills of cricket but also to elucidate the neurophysiological mechanisms involved in the improvements are seen.

5. Conclusion

Based on the result and the limitations of the study, it was concluded that online coaching module of MSDCA implemented was able to improve the batting set-up as well as front foot drive which was effective for online coaching programme in cricket. This supports suggestions that batting technique can improve through Online coaching programme through a specific and systemic coaching module. The improvement in batting technique experimented in this study suggests that improvements in batting technique might affect 'on-field' improvements in batting performance.

Further, the results suggest that the drills used during the online coaching programme produced greater improvement in some batting skills than the control intervention group.

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About the Authors

Dr. Thander Abhijit is an Assistant Professor in the Department of Physical Education & Sport Science, at the Visva-Bharati University, and also the Acting Assistant Director of Visva-Bharati Sports Board, at the Visva-Bharati University. He is the in-charge of the Sports Technology Laboratory, at the Department of Physical Education & Sport Science. **Lahiri Satrajit** is a former Ranji Trophy Player of Bengal, India and also a National Cricket Academy (NCA)-BCCI accredited Level C and England & Wales Cricket Board accredited Level III Cricket coach. He was also a former visiting faculty of Coaches education course of NCA, BCCI. Presently he is the Chief Coach of MS Dhoni Cricket Academy, India.

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