AN ANALYSIS OF SACHIN TENDULKAR'S ODI PERFORMANCE

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ABSTRACT

To compare with other international sports, cricket has not enjoyed the same research attention in respect of the performance analysis. Analyzing the performance helps in better understanding of how success can be achieved at all level and also how individual performance of an athlete can be enhanced. Being a successful cricketer the performance analysis of Sachin Ramesh Tendulkar can open a new window in the knowledge of cricket.The objective of this study is to given a better understanding about the performance displayed by the Master blaster, Sachin Ramesh Tendulkar during last twenty two years of ODI career. Each score of Sachin Ramesh Tendulkar's batting performance in ODI career from his debut match 18th of December, 1989 up to 13th of March, 2012 has been downloaded from the website of Cricket info (http://wwwespncricketinfo.com), and there after calculation of all his scores was done as per following- Day and Day-night matches, Against the eight (8) test playing nation, Batted first and second in the matches, Home, away and neutral venue matches and Team won the matches and lost the matches. For analyzing the variance, "T" test and ANOVA were used in this study. Though there are some mean differences were observed in every analysis, no significant difference was found among the variances at 95% level of confidence. From the results it may be concluded that the batting performance of Sachin Ramesh Tendulkar was not affected by any circumstances of cricket, which contributed to him the greatest batsman in the world.

Key Words: Performance, Analysis, Batting and Circumstances.

INTRODUCTION:

Cricket is a popular sport around the world and is played mostly in the erstwhile English colonies. Its popularity is the highest in the Indian subcontinent (Mukherjee, 2012). Elite cricket is a professional international sport that holds a prominent position in world. However, compared with other international sports, cricket has no enjoyed the same research attention in respect of the performance analysis.

Sachin Ramesh Tendulkar is an Indian cricketer widely considered by many to be one of the greatest batsmen of all time. About him BCC sports magazine said that, "Beneath the helmet, under

the unruly curly hair, in side the cranium, there is some thing we don't know, something beyond scientific measure. Something that allows him to soar, to roam a territory of sports that forget us, even those who are gifted enough to play alongside him can not even fathom. When he goes out to bat, people switch on their television sets and switch off their lives."

While of analyzing the performance of this great batsman we understand from the reviews that the performance analysis of any sports helps to provide a better understanding of how success can be achieved at all level of sports (Hughes et al, 1997). After an event, qualitative analysis of the performance reflects an accurate, reliable and valid way of analysis, which base on precise observation and recall is a key tool for improving the future performance (Coleman S, 1998). This type of study has tended to focus on tactical and technical indicators and in so doing has contributed to our understanding of the physiological and psychological also (JSS, 2002).

A normative profile of a player can be extended for competitive purpose. The study in quantitative analysis in cricket is very few but we can find so many such type of work was conducted by the scientist in other games for example; Dech et al. (2010) developed a network approach to quantify the performance of individual player in soccer. We are no longer reliant on "the eyeball test" to guess how well a sports person performs. We will have to specify the data, break down and explain in easy manner to understand.

The aim of this study is to give a better understanding about the performance given by the Master blaster, Sachin Ramesh Tendulkar during his last twenty two years.

METHODOLOGY:

As a game, cricket is a statistician's delight. Each game of cricket throws up a huge amount of performance related statistics. We take some statistical data to give some conclusion about the study. Data were collected from the website of Cricket info (http://wwwespncricketinfo.com) on 15th of March, 2012.

The investigators downloaded the information of each score of Sachin Ramesh Tendulkar about all his batting performance in ODI career from his debut match 18th of December, 1989 up to 13th of March, 2012. More specifically the investigators calculate the score of his-

1.   Day and Day-night matches.

2.   Against the eight (8) test playing nation.

3.   Batted first and second in the matches.

4.   Home, away and neutral venue matches.

5.   Team won the matches and lost the matches.

In the analysis the authors have excluded the matches with no result and matches which were abandoned. No advantage was given if he played any not out innings.

For analyzing the day and day night matches, batted first and second in matches, team won the matches and lost the matches, the 'T' test and the ANOVA test was used in case of home, away and neutral venue matches. We considered the mean, standard deviation and graphical representation were considered for concluding the performance against the eight test playing nation.

RESULT:

The raw data used in the development of any method for representing Sachin's performance are the innings-by-innings scored by him. However, using this raw data poses a problem. In some of the innings he would not have been dismissed. In such case the score would not reflect the number of runs he could potentially have gone on to score. The score for these innings was calculated by the number of runs at he batted on.

The performance among day and day-night matches, are presented in Table I. The mean and SD of the total run scored by Sachin Tendulkar in batting first and second in the innings are presented in Table II, while runs scored by him in the won and lost matches calculation are presented in Table III. In case of performance at home, away and neutral venue matches played by Tendulkar are presented in Table IV, where as his batting performance among the eight Test playing nation in ODI is presented in Table V. Analysis indicated no significant differences (P>0.05) between the performance of day and day-night matches, batting first and second in the innings and among the won and lost matches he scored. Furthermore insignificant differences are observed in home, away and neutral venue matches (P at best= 0.079) as well as the ODI batting performance against eight Test playing countries (P at best=0.952).

Still some mean difference were observed in every analysis which is presented in Graph I to V. Grater mean is found in day-night matches than the day matches. Obtain better mean when Sachin

batted 1st than the 2nd innings in the matches and found grater mean in case of own matches than lost matches. It was also observed thar the mean value is more over equal and better in home and neutral venue matches than the away matches. Among the various countries, study focused highest mean value against Australia as well as lowest against the South Africa.

Table no. I (Day and Day-night matches)

	Day match	Day-night match	'P' value
Mean	38.68	42.90	
SD	37.72	42.55	0.27125
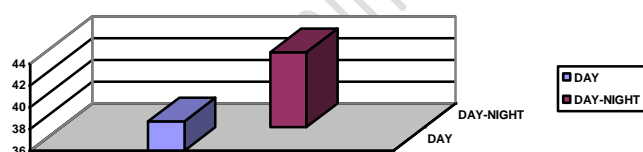
Graph no. I

Day and Day-night matches

Table no.II (Batted 1st & 2nd)

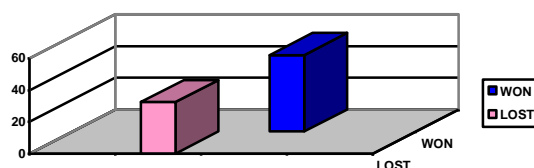|	Batted 1st	Batted 2nd	'P' value
Mean	43.79	37.51	
SD	42.68	37.14	0.0976
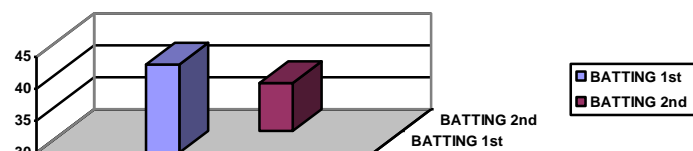
Graph no.II

Batted 1st & 2nd

Table no. III (Won & lost matches)

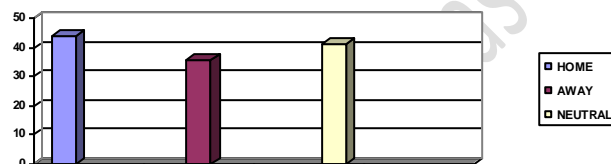|	Won match	Lost match	'P' value
Mean	48.28	32.51	
SD	42.58	35.78	3.78

Graph no. III

Won & lost matches

Table no. IV (Home, away & neutral venue)

Graph no. IV

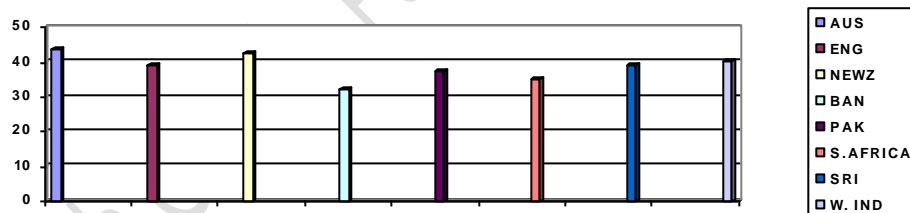|	Home	Away	Neutral	'P' value
Mean	43.60	34.69	43.93	0.079
SD	42.69	35.41	40.93	

Home, away & neutral venue

Table no V (Against eight test playing nation)

	Aus	Eng	Newz	Bang	Pak	S. Africa	Sri	W. Ind
Mean	43.59	39.32	42.68	38.2	37.48	35.10	38.91	40.33
SD	43.31	31.22	12.02	21.81	38.37	38.35	37.42	38.32

$F= 0.3027$ AND **$P=0.9525$**

Graph no.V

Against eight test playing nation

DISCUSSION:

Cricket is a game, where the performance is very much reflected by the environment (Foster D, 1999). In day and day-night matches players have to perform in different environmental situation

like dew and light (flood light) factors. Still Sachin's performances in both situations are not differing. In one day cricket, batted 1st and 2nd bring various advantages as well as disadvantage depending upon the pitch, strength and weakness of own and opponent team. Team gains an advantage by batting last in test cricket (P.Allsopp et al. 2008). But there is no conflict in both the performance that Sachin batted 1st or 2nd in the matches. There is a question in the mind of billion of people that how much Sachin had contributed for winning his team? This study concluded that he is more over equal in his performance whether it is won match or lost match. The venue of the match plays an important role in cricket. Especially the nature of the pitch is altered from one venue to another, which also supported by Carre (2000) as surface is also independent factor that will affect the pace. Pace and bounce of the pitches in New Zealand are very economical concluded by McAuliffe & Gibbs (1997). Pace and moisture status of the pitches are altered from country to country (Baker et al, 1998). With those so many critical conditions it can reveal from this study that Sachin's performances did not vary at various venues in the world. The investigator also can not find immensely difference in his performance against the eight good cricket playing nations. Though it is very tough to equally perform against so many countries in various circumstances.

CONCLUSION:

In this study, the effort was made to clarify the batting performance of Sachin Tendulkar in relation to some facts such as whether those matches ware played in the day or night, bated first or second in the innings, won or lost, the venue, and the opposing team. From the results it is concluded that the batting performance of Sachin Tendulkar was not affected by the above mentioned factors. He maintains his consistency in the batting performance and that is why Sachin Ramesh Tendulkar is one of the greatest batsmen in the world.

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