

Analysis of unforced errors in relation to performance in singles in badminton

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ABSTRACT

The purpose of the study was the analysis of unforced errors in relation to performance in singles in badminton. All the men badminton players of Devi Ahilya University, Indore badminton team and the players who played in singles matches from their teams against them in the West Zone Inter University Tournament organized by Veer Narmad South Gujarat University, Surat from 24th to 26th October 2010 were selected to serve as the subjects for this study. No significant relationship ($\rho = 0.166$, $\rho = - 0.016$) was found between the number of unforced errors and singles ranking of winners and losers male badminton players respectively. However significant relationship was observed between unforced errors of winners and losers male badminton players in singles ($r = 0.825$). Further significant difference was observed between unforced errors of winners and losers male badminton players in singles ($t = 8.322$).

Key words: Unforced errors, Singles, League matches.

Badminton is a competitive game. Players compete against each other whenever they go onto the court to play a game. If winning is of primary importance in competition, then the performance the players gives in the game is the determining factor in winning. The competition is the arena in which a player tests his skills against his opponent.

Unforced errors result basically from 'lack of care, concentration technique or tactical awareness. Top class players, because they have practiced forty or fifty consecutive shot routines, make very few such errors. They thus give away virtually no points unless under the relentless and continuous pressure of an equal or better player. Their opponents have therefore to play to even finer limits to gain points and in doing so, are themselves possibly forced into errors.

METHODOLOGY

All the men badminton players of Devi Ahilya University, Indore Badminton team and the players who played in singles matches from their teams against them in the West Zone Inter University Tournament organized by Veer Narmad South Gujarat University, Surat from 24th to 26th October 2010 were selected to serve as the subjects for this study. Thus a total of 16 players from five universities served as subjects. Age of the subjects ranged between 18 to 28 years.

Initially data on unforced errors committed by badminton players of Devi Ahilya University, Indore Badminton Team was collected during the coaching camp, held at university gymnasium hall for the West Zone University Badminton Tournament, everyday in

the evening session from 12th to 22nd October 2010, in which all the players played league matches in singles against each other. Thus a total of 21 matches were played to establish the ranking of Devi Ahilya University players on the basis of their results in league matches during the coaching camp.

Further data on unforced errors of Devi Ahilya University Badminton players and their opponents in singles matches against different teams was collected during West Zone Inter University Badminton Tournament held at Veer Narmad South Gujarat University, Surat from 24th to 26th October 2010.

Total numbers of unforced errors committed by the winner and loser badminton players in singles for each match were recorded. Devi Ahilya University Men Badminton Team was placed second in the West Zone University Tournament and its players played 9 singles matches in total against their opponent players from different university teams. Thus a total of 30 singles matches were recorded for analysis of data on unforced errors. The ranking of Devi Ahilya University and their opponent team players was assigned by three badminton experts based on their performance in the coaching camp and West Zone University Tournament.

OBSERVATION AND DISCUSSION

To find the relationship between numbers of Unforced Errors and Singles Ranking of West Zone University winner and loser male badminton players rank order correlation was computed and the data pertaining to this has been presented in Table-1 and 2.

TABLE - 1
RELATIONSHIP BETWEEN UNFORCED
ERRORS AND RANKING OF WINNER
MALE BADMINTON PLAYERS

| S. No. | Variable Correlated | Coefficient of Correlation |
|--------|--|----------------------------|
| 1. | Unforced Errors vs. Ranking of Winners | 0.166* |

N = 8 *not significant at 0.05 level $r_{0.05(6)} = 0.707$

In Table - 1 the obtained ρ value of 0.166 clearly indicates a very low positive correlation between ranking and unforced errors of winner male badminton players in singles which is not significant as the required rank order correlation value at 0.05 level of significance with 6 degrees of freedom is 0.707.

TABLE - 2
RELATIONSHIP BETWEEN UNFORCED
ERRORS AND RANKING OF LOSER
MALE BADMINTON PLAYERS

| S. No. | Variable Correlated | Coefficient of Correlation |
|--------|---------------------------------------|----------------------------|
| 1. | Unforced Errors vs. Ranking of Losers | -0.016* |

N = 15 *not significant at 0.05 level $r_{0.05(13)} = 0.514$

Table-2 the obtained ρ value of -0.016 clearly indicates a very low negative correlation between ranking and unforced errors of loser male badminton players in singles which is not significant as the required value at 0.05 level of significance with 13 degrees of freedom is 0.514.

To find the relationship between numbers of unforced errors of winner and loser male badminton players' product moment correlation was computed and the data pertaining to this has been presented in Table-3.

TABLE - 3
RELATIONSHIP BETWEEN UNFORCED
ERRORS OF WINNER AND LOSER
MALE BADMINTON PLAYERS

| S. No. | Variable Correlated | Coefficient of Correlation |
|--------|-------------------------------------|----------------------------|
| 1. | Unforced Errors of Winner vs. Loser | 0.825* |

N = 60 *Significant at 0.05 level $r_{0.05(58)} = 0.250$

It is evident from Table - 3 that the obtained value of $r = 0.825$ shows a high significant positive correlation between unforced errors of winner and loser male badminton players in singles as the required value at 0.05 level of significance with 58 degrees of freedom is 0.250.

To find the significance difference between means of unforced errors of winner and loser male badminton players, t - ratio was computed and the data pertaining to this has been presented in Table - 4.

TABLE - 4
SIGNIFICANCE DIFFERENCE BETWEEN
MEANS OF UNFORCED ERRORS OF
WEST ZONE WINNER AND LOSER
MALE BADMINTON PLAYERS

| Factor | N | Mean | S. D. | Mean Diff. | σ_{DM} | t-Ratio |
|--------|----|--------|--------|------------|---------------|---------|
| Winner | 30 | 31.833 | 13.779 | | | |
| Loser | 30 | 44.567 | 8.270 | 12.734 | 1.530 | 8.322* |

*Significant at 0.05 level $\text{tab } t_{0.05(58)} = 2.00$

Table - 4 shows that there is significant difference between unforced errors of winner and loser male badminton players in singles as the obtained t - value of 8.322 is higher than the $\text{tab } t_{0.05(58)} = 2.00$.

From the analysis of data it is evident that no significant relationship (H_0 , accepted) was found between the unforced errors and ranking of winner and loser male badminton players in singles as obtained ρ values of 0.166 and - 0.016 respectively were less than the tabulated values.

Significant relationship (H_0 , rejected) was found between the unforced errors of winner and loser male badminton players in singles as obtained r - value of 0.825 was higher than the tabulated value of 0.250. This may be because both winner and loser players committed more number of errors at this level of competition. At higher level of competition players commit less number of unforced errors and the player making fewer errors in a particular match usually wins.

It is evident that winners and losers west zone (H_0 , rejected) male badminton player in singles differed significantly in unforced errors as the obtained t-value of 8.322 was higher than the $\text{tab } t_{0.05(58)} = 2.00$. This was because winners (31.833) committed less number of unforced errors than losers (44.567). This may be attributed to the fact that winning or losing a match in rally point system to a large extent depends upon the number of unforced errors committed by the players.

CONCLUSIONS

Within the limitation of the present study, the following conclusions were drawn:

1. No significant relationship was found between the number of unforced errors and singles ranking of winner and loser male badminton players
2. Significant relationship was found between unforced errors of winner and loser male badminton players in singles.
3. Mean unforced errors committed by winner were less than the loser badminton players in singles.
4. Significant difference was found between unforced errors of winner and loser male badminton players in singles.

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