Cricket Analysis Project

Perspective from the bowler's side - II

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Analysis of effectiveness of Bowlers (Left-Left Right-Right Pair Of Batsman)

Note: Left handed and right handed batsmen only does not take extra runs into consideration

Innings - 1

Economy Analysis

Against all type of batsmen

Bowler Type	Mean	Std. Deviation	Count
Left pace	5.31	1.979	89
Left spin	4.55	1.206	147
Right pace	5.26	1.626	584
Right spin	5.25	1.618	308

Two sample t-test results:

The Economy of **Left Spin Bowlers** is significantly lower than other type of bowlers.

Against all left-handed batsmen

Bowler Type	Mean	Std. Deviation	Count
Left pace	5.16	2.534	89
Left spin	4.43	1.716	147
Right pace	5.01	2.219	584
Right spin	4.98	1.871	308

Two sample t-test results:

The Economy of **Left Spin Bowlers** is significantly lower than other type of bowlers.

Against all right-handed batsmen

Bowler Type	Mean	Std. Deviation	Count
Left pace	5.12	2.021	89
Left spin	4.44	1.230	147
Right pace	5.05	1.653	584
Right spin	5.18	1.696	308

Two sample t-test results:

The Economy of **Left Spin Bowlers** is significantly lower than other type of bowlers.

Deliveries Per extra run

Against all type of batsmen

Bowler Type	Mean	Std. Deviation	Count
Left pace	32.90	21.145	77
Left spin	75.23	68.426	101
Right pace	32.45	28.023	497
Right spin	57.72	58.728	230

Two sample t-test results:

The **Spin Bowlers** are giving significantly lower extras than other type of bowlers.

Deliveries Per wicket taken

Against all type of batsmen

Bowler Type	Mean	Std. Deviation	Count
Left pace	33.50	13.344	80
Left spin	45.83	24.348	125
Right pace	38.70	22.640	484
Right pace	44.06	23.205	249

Two sample t-test results:

Pacers are taking wickets at a significantly higher rate than spinners

Against all left-handed batsmen

Bowler Type	Mean	Std. Deviation	Count
Left pace	36.03	31.862	46
Left spin	34.55	21.177	44
Right pace	37.72	30.038	241
Right pace	35.42	26.375	127

Against all right-handed of batsmen

Bowler Type	Mean	Std. Deviation	Count
Left pace	32.57	14.455	80
Left spin	44.43	21.909	123
Right pace	37.09	22.551	468
Right pace	44.70	22.906	231

Two sample t-test results:

Pacers are taking wickets at a significantly higher rate than spinners

Boundaries per ball

Against all type of batsmen (4s)

Bowler Type	Mean	Std. Deviation	Count
Left pace	0.0883	0.0509	89
Left spin	0.0504	0.0393	147
Right pace	0.0863	0.0501	584
Right spin	0.0653	0.0556	308

Two sample t-test results: Left & right Spinners are giving fours at a significantly lower rate than others

Against all type of batsmen (6s)

Bowler Type	Mean	Std. Deviation	Count
Left pace	0.0151	0.0304	89
Left spin	0.0131	0.0147	147
Right pace	0.0126	0.0215	584
Right spin	0.0161	0.0205	308

Runs conceded per wicket

Against all type of batsmen

Bowler Type	Mean	Std. Deviation	Count
Left pace	29.36	15.179	80
Left spin	33.78	19.913	125
Right pace	32.81	21.427	484
Right spin	37.22	23.192	249

Against all left-handed batsmen

Bowler Type	Mean	Std. Deviation	Count
Left pace	28.36	26.043	46
Left spin	24.88	18.013	44
Right pace	28.58	24.588	241
Right spin	25.03	19.504	127

Against all right-handed of batsmen

Bowler Type	Mean	Std. Deviation	Count
Left pace	27.57	15.989	80
Left spin	32.27	19.384	123
Right pace	30.01	20.822	468
Right spin	37.09	22.088	231

Innings - 2

Economy Analysis

Against all types of batsmen

Bowler Type	Mean	Std. Deviation	Count
Left pace	4.78	1.263	92
Left spin	4.57	1.282	139
Right pace	4.95	1.526	560
Right spin	5.18	1.779	320

Two sample t-test results:

The Economy of **Left handed Bowlers** is significantly lower than other type of bowlers.

Against all left-handed batsmen

Bowler Type	Mean	Std. Deviation	Count
Left pace	4.65	1.572	92
Left spin	4.86	2.364	139
Right pace	4.78	1.960	560
Right spin	4.98	2.269	320

Against all right-handed batsmen

Bowler Type	Mean	Std. Deviation	Count
Left pace	4.54	1.309	92
Left spin	4.41	1.397	139
Right pace	4.74	1.557	560
Right spin	5.12	2.213	320

Two sample t-test results:

The Economy of **Left handed Bowlers** is significantly lower than other type of bowlers.

Deliveries Per extra run

Against all type of batsmen

Bowler Type	Mean	Std. Deviation	Count
Left pace	35.71	41.499	82
Left spin	85.34	77.039	96
Right pace	34.34	29.844	456
Right spin	60.97	64.000	222

Two sample t-test results:

Spinners give extras at a significant low rate than pacers.

Deliveries Per wicket taken

Against all type of batsmen

Bowler Type	Mean	Std. Deviation	Count
Left pace	41.54	24.173	81
Left spin	42.95	24.626	118
Right pace	43.04	29.966	433
Right spin	41.92	25.778	245

Against all left-handed batsmen

Bowler Type	Mean	Std. Deviation	Count
Left pace	32.70	20.404	44
Left spin	34.16	28.033	39
Right pace	35.39	29.008	220
Right spin	36.00	28.370	121

Against all right-handed of batsmen

Bowler Type	Mean	Std. Deviation	Count
Left pace	40.53	22.264	79
Left spin	42.51	23.328	117
Right pace	43.78	30.589	412
Right spin	42.12	26.487	229

Boundaries per ball

Against all type of batsmen (4s)

Bowler Type	Mean	Std. Deviation	Count
Left pace	0.0807	0.0434	92
Left spin	0.0593	0.0419	139
Right pace	0.088	0.0521	560
Right spin	0.0692	0.0542	320

Two sample t-test results:

Spinners gives significantly less number of fours per ball than pacers.

Against all type of batsmen (6s)

Bowler Type	Mean	Std. Deviation	Count
Left pace	0.0151	0.030	89
Left spin	0.0131	0.0147	147
Right pace	0.0126	0.0215	584
Right spin	0.0161	0.0205	308

Runs conceded per wicket

Against all type of batsmen

Bowler Type	Mean	Std. Deviation	Count
Left pace	32.86	21.985	81
Left spin	32.76	22.347	118
Right pace	34.87	27.326	433
Right spin	33.74	24.058	245

Against all left-handed batsmen

Bowler Type	Mean	Std. Deviation	Count
Left pace	26.77	18.805	44
Left spin	27.21	26.072	39
Right pace	27.83	26.398	220
Right spin	25.98	23.022	121

Against all right-handed of batsmen

Bowler Type	Mean	Std. Deviation	Count
Left pace	40.54	22.264	79
Left spin	42.51	23.328	117
Right pace	43.78	30.589	412
Right spin	42.13	26.487	229

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