Cricket Analysis Project

Perspective from the bowler's side - I

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Analysis of effectiveness of Bowlers (Left-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 batsman

Bowler Type	Mean	Std. Deviation	Count
Left pace	5.17	1.480	84
Left spin	4.70	1.300	135
Right pace	5.26	1.667	548
Right spin	5.15	1.580	291

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	4.95	2.051	84
Left spin	4.64	1.659	135
Right pace	5.03	1.991	548
Right spin	5.00	1.851	291

Two sample t-test results:

Against all right-handed batsmen

Bowler Type	Mean	Std. Deviation	Count
Left pace	4.88	1.841	84
Left spin	4.67	2.437	135
Right pace	4.99	2.038	548
Right spin	4.99	2.196	291

Two sample t-test results:

Deliveries Per extra run

Against all type of batsmen

Bowler Type	Mean	Std. Deviation	Count
Left pace	25.89	17.28	71
Left spin	60.26	36.96	87
Right pace	31.72	26.57	464
Right spin	59.13	66.36	205

Two sample t-test results:

The extras given by **Spin Bowlers** is significantly lower than other type of bowlers.

Deliveries Per wicket taken

Against all type of batsmen

Bowler Type	Mean	Std. Deviation	Count
Left pace	34.29	17.569	70
Left spin	43.29	20.662	107
Right pace	41.19	23.390	424
Right spin	43.97	23.128	226

Two sample t-test results:

Against all left-handed batsmen

Bowler Type	Mean	Std. Deviation	Count
Left pace	32.64	17.809	65
Left spin	40.82	25.048	94
Right pace	39.24	24.493	364
Right spin	41.58	27.659	185

Two sample t-test results:

Against all right-handed of batsmen

Bowler Type	Mean	Std. Deviation	Count
Left pace	33.88	14.804	59
Left spin	41.80	28.672	87
Right pace	37.95	22.537	354
Right spin	43.62	30.129	183

Two sample t-test results:

Boundaries per ball

Against all type of batsmen (4s)

Bowler Type	Mean	Std. Deviation	Count
Left pace	0.0829	0.0440	84
Left spin	0.0550	0.0467	135
Right pace	0.0874	0.0470	548
Right spin	0.0614	0.0512	291

Two sample t-test results: Spinners have the advantage

Against all type of batsmen (6s)

Bowler Type	Mean	Std. Deviation	Count
Left pace	0.0144	0.0269	84
Left spin	0.0132	0.0159	135
Right pace	0.0138	0.0233	548
Right spin	0.0142	0.0208	291

Two sample t-test results:

Runs conceded per wicket

Against all type of batsmen

Bowler Type	Mean	Std. Deviation	Count
Left pace	28.69	15.875	70
Left spin	34.45	19.533	107
Right pace	35.22	21.219	424
Right spin	36.12	20.775	226

Two sample t-test results:

The runs conceded per wicket of **Left pace Bowlers** is significantly lower than other type of bowlers.

Against all left-handed batsmen

Bowler Type	Mean	Std. Deviation	Count
Left pace	25.55	14.102	65
Left spin	32.05	20.418	94
Right pace	32.42	22.723	364
Right spin	32.42	23.321	185

Two sample t-test results:

Against all right-handed of batsmen

Bowler Type	Mean	Std. Deviation	Count
Left pace	26.33	13.342	59
Left spin	30.89	23.680	87
Right pace	30.52	19.515	354
Right spin	34.05	25.482	183

Two sample t-test results:

Innings - 2

Economy Analysis

Against all types of batsmen

Bowler Type	Mean	Std. Deviation	Count
Left pace	4.85	1.610	83
Left spin	5.09	2.040	126
Right pace	5.21	1.915	527
Right spin	5.09	1.931	289

Two sample t-test results:

Against all left-handed batsmen

Bowler Type	Mean	Std. Deviation	Count
Left pace	4.66	2.051	83
Left spin	4.83	1.659	126
Right pace	5.01	1.991	527
Right spin	4.72	1.851	289

Two sample t-test results:

Against all right-handed batsmen

Bowler Type	Mean	Std. Deviation	Count
Left pace	4.65	1.732	83
Left spin	4.93	2.506	126
Right pace	4.94	2.368	527
Right spin	5.05	2.490	289

Two sample t-test results:

Deliveries Per extra run

Against all type of batsmen

Bowler Type	Mean	Std. Deviation	Count
Left pace	32.06	22.909	67
Left spin	51.24	40.948	82
Right pace	30.97	22.901	429
Right spin	57.01	61.607	196

Two sample t-test results:

Spinners are giving relatively lower extras(wides and no balls) than pacers.

Deliveries Per wicket taken

Against all type of batsmen

Bowler Type	Mean	Std. Deviation	Count
Left pace	38.75	21.492	75
Left spin	47.17	29.649	101
Right pace	42.41	26.612	390
Right spin	42.95	26.333	203

Two sample t-test results:

Against all left-handed batsmen

Bowler Type	Mean	Std. Deviation	Count
Left pace	32.34	19.002	69
Left spin	43.25	26.450	81
Right pace	39.31	24.824	322
Right spin	39.04	29.487	170

Two sample t-test results:

Against all right-handed of batsmen

Bowler Type	Mean	Std. Deviation	Count
Left pace	45.62	30.467	62
Left spin	43.77	32.841	81
Right pace	39.13	25.994	318
Right spin	43.44	34.324	152

Two sample t-test results:

Boundaries per ball

Against all type of batsmen (4s)

Bowler Type	Mean	Std. Deviation	Count
Left pace	0.0897	0.0567	83
Left spin	0.0641	0.0431	126
Right pace	0.0949	0.0605	527
Right spin	0.0655	0.0610	289

Two sample t-test results: Spinners give significantly less fours than pacers.

Against all type of batsmen (6s)

Bowler Type	Mean	Std. Deviation	Count
Left pace	0.0143	0.0269	84
Left spin	0.0131	0.0159	135
Right pace	0.0137	0.0233	548
Right spin	0.0142	0.0208	291

Two sample t-test results:

Runs conceded per wicket

Against all type of batsmen

Bowler Type	Mean	Std. Deviation	Count
Left pace	31.69	19.674	75
Left spin	38.74	27.573	101
Right pace	35.46	24.741	390
Right spin	34.63	23.128	203

Two sample t-test results:

Against all left-handed batsmen

Bowler Type	Mean	Std. Deviation	Count
Left pace	25.17	16.611	69
Left spin	34.07	23.039	81
Right pace	31.22	20.164	322
Right spin	29.53	25.210	170

Two sample t-test results:

Against all right-handed of batsmen

Bowler Type	Mean	Std. Deviation	Count
Left pace	45.62	30.467	62
Left spin	43.77	32.841	81
Right pace	39.12	25.994	318
Right spin	43.44	34.324	152

Two sample t-test results:

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