

Clutch Hitting

Ashley Robinson

Roadmap

- Definition
- Survey of Research: For and Against
- MLB vs College Data
- Experiment
- Results
- Summary

Definition

- What does “clutch hitting” actually mean?
- “Clutch usually is defined as the extent that players change their performance, for better or worse, in high leverage situations. High leverage situations are the most critical moments in games, based on number of runners on base, the score, the number of outs, and the inning of the game” (Sabermetrics, 2012)

For and Against

- Very debatable topic
- Tom Ruane experiment from Retrosheet
- Russell Carlton experiment from foxsports

MLB vs College Data

- SABR recommendation
- Sample variances
- Data issues with webster data
- “Where the concept may exist there is not enough data and where there is enough data there is not the presence of the concept.”

Experiment

- Extracted clutch and non-clutch situations from Webster data
- Used R to compute averages for each situation
- Compared clutch and non-clutch average to overall average
- If clutch exists, there should be a significant difference

Player	Overall AVG	Clutch AVG	Nonclutch AVG
12 Bishop, Zach.....	0.333	0.372	0.267
33 Budrovich, Jacob.	0.250	0.375	0.000
23 Celleghin, Jake..	0.238	0.289	0.190
31 Dahncke, Christia	0.000	0.000	0.000
3 Fischer, Ryan....	0.091	0.105	0.000
1 Golich, Mike.....	0.317	0.390	0.238
44 Kammer, Jeff.....	0.328	0.309	0.409
25 LaHue, Austin....	0.167	0.250	0.000
11 Ludwig, Tyler....	0.000	0.000	0.000
16 Magruder, Bailey.	0.182	0.222	0.100
17 Milosch, Jake....	0.273	0.245	0.289
5 Murawski, Matt...	0.269	0.132	0.455
30 Naliwajko, Adam..	0.286	0.287	0.250
27 Rajkovich, Dylan.	0.237	0.250	0.239
22 Smith, A.J.....	0.000	0.500	0.000
13 Smith, Brandon...	0.252	0.342	0.158
40 Spisak, K.J.....	0.000	0.000	0.000
20 Thomas, Blake....	0.349	0.379	0.314
14 Uhrich, Kyle.....	0.329	0.318	0.347
0 Wick, Mike.....	0.377	0.338	0.414
38 Williams, David..	0.000	0.000	0.000
2 Wollnik, Matt....	0.297	0.294	0.319

Summary

- Defining “clutch hitting”
- Arguments for and against
- MLB vs College data
- Experiment
- Results

References

- (2012). Retrieved from crawfishboxes.
- Carleton, R. (n.d.). *just a bit outside*. Retrieved from foxsports.
- Ruane, T. (n.d.). *In Search of Clutch Hitting*. Retrieved from retrosheet.org.
- *Statistics*. (2016). Retrieved from webster athletics.