Patrick Briand MLB Analytics Hackathon-TruMedia Networks

A Quick Glimpse Into Component Batting Skills and Batter Classifications

In recent years, advanced metrics such as wOBA and wRC+ have made strides towards providing a more accurate definition of how value is derived from a hitter. These stats answer the questions of how much a single, double or triple is truly worth, adjust for league and park effects, and allow analysts and fans alike the chance to properly evaluate a hitter. With that in mind, and an eye on the 2015 postseason, let's examine which hitters excelled at the specific components of these advanced metrics.

As a refresher, the wOBA formula for the 2013 season, according to Fangraphs.com, was:

$$wOBA = (0.690 \times uBB + 0.722 \times HBP + 0.888 \times 1B + 1.271 \times 2B + 1.616 \times 3B + 2.101 \times HR) / (AB + BB - IBB + SF + HBP)$$

wOBA is a composite statistic that doe not truly categorize hitters (unless you were splitting them up into brackets based on their wOBA) but the inputs into the statistic and its' goal relate to my analysis and my main question: Which hitters most excelled at each of wOBA's components during the 2015 postseason?

Hitter Classifications:

In the 2015 Postseason, Astros OF **Colby Rasmus** was essentially Babe Ruth. he average 4.3 AB/HR and notched an incredible 29.2% walk rate that was 10% higher than any other postseason qualifier. He hit only one roundball in 24 PAs, showing that he was elevating and crushing the ball. His 765 ISO far outstripped any other hitter. Rasmus dominated in his brief run, thus diluting the value of any one element of his offensive profile. He was about as well-rounded a hitter in his postseason stint with the Astros as Tigers 1B **Miguel Cabrera** was in his peak years with the Tigers. Rasmus falls under my 'All-Around Excellence' Category. Taking in patience (walk rate and pitches/PA) power (AB/HR, XBH %, and ISO), and contact rate (100%-K%, batting AVG), Rasmus, who hit .412, derived extreme value out of all three main hitter components. Joining the free-spirited outfielder in my 'All-Around Excellence' category were outfielders **Jorge Soler** of the Cubs and **Curtis Granderson** of the Mets. Soler hit a sizzling . 474 with a 1.705 OPS, making pitchers throw 4.44 pitches/PA, and slamming 3 HR in 19 AB. Granderson hit a fine .283, but his skill was making pitchers throw (4.55 pitches/PA, 12.9% walk rate). He also bashed 3 HR and 2 2B in the postseason.

There were three other key types of hitters I zeroed in on.

'Santanas', 'Trumbos', and 'Reveres':

Each of the hitter types are named for a current MLB player who generates an extremely high portion of their value from either A) plate discipline; B) power; or C) contact ability. There are other hitters who have more power than Mark Trumbo or a greater contact ability than Ben Revere (though few players walk more than Carlos Santana, except for maybe the more nuanced Joey Votto), but no player in the modern game creates more of their positive value out of the use of these three vital skills than those guys.

So without further ado, here are your 'Santanas', 'Trumbos', and 'Reveres' of the 2015 postseason.

'Santanas':

Astros 3B **Luis Valbuena** hit for considerable pop in the 2015 Postseason (.176 ISO) but generated the greater portion of his value by walking at a hefty 19% clip. Mets 3B **David Wright** hit a paltry .185, but the veteran third-sacker walked 15.6% of the time. Finally, Royals CF **Lorenzo Cain**, known for his speed and quick bat, walked in 14.9% of his postseason PAs while posting a mere .081 ISO and .339 SLG.

'Trumbos':

If you watched the 2015 Postseason and read my intro, you should have seen Mets 2B **Daniel Murphy** coming on this list a long time ago. Murphy hit 7 dingers in 58 AB, changing his offensive profile completely from the regular-season Daniel Murphy, who hit for gap power and didn't strike out. Post-Season Murphy struck out twice as much as he walked, whiffing 13 times in 64 PA. Joining him as true power producers are Cubs LF **Kyle Schwarber** (5 HR, monster . 556 ISO), Mets LF **Michael Conforto** (1 walk in 31 PA, but 3 HR), and Mets C **Travis D'Arnaud** (3 HR, .182 AVG, 0 walks in 55 PA).

'Reveres':

Royals SS **Alcides Escobar** owns this category, as he drew 0 walks in 77 PA, yet hit .329 with 8 XBH. Escobar's 3.26 pitches/PA were the lowest for among the top 20 most used hitters in terms of Pas this postseason. Mets OF **Juan Lagares** deserves a mention as well, as he hit .348 with just 1 walk and 2 XBH in 25 PA. Also, Blue Jays OF **Ben Revere** himself merits discussion, as he hit .255 yet managed a meager .022 ISO and just 4 walks in 51 PA.

Also, a bonus consideration:

Hitters can be known for high walk rates or OBPs, but truly making a pitcher work and grinding out at-bats is often an undervalued skill. Here were the top 5 hitters in pitches per PA in the 2013-2015 postseasons, minimum 20 ABs:

1. Brandon Moss, Oakland	4.71
2. Mike Napoli, Boston	4.56
3. Wil Myers, Tampa Bay	4.48
4. Jed Lowrie, Oakland	4.41
5. Yoenis Cespedes, Oakland	4.32

1. Jayson Werth, Washington	4.75
2. J.J. Hardy, Baltimore	4.68
3. Nick Markakis, Baltimore	4.31
4. Matt Carpenter, St. Louis	4.31
5 Mike Moustakas Kansas City	4 18

1. Alex Gordon, Kansas City	4.68
2. Lucas Duda, New York-N	4.59
3. Curtis Granderson, New York-N	4.55
4. Colby Rasmus, Houston	4.46
5. Jorge Soler, Chicago	4.44

I think it's clear that sabermetrically inclined organizations like Houston, New York-N, and Oakland place a value on hitters who can work deep counts and reach base via the walk. However, while coaxing long at-bats is a great skill to have, it doesn't alway correlate to high walk rates, as shown in this next psuedo-graph:

Highest Walk Rate By Hitters in 2013-2015 Postseasons, Min. 20 PAs 2013

1. David Ortiz, Boston	23.5%
2. Alex Avila, Detroit	20%
3. Andrew McCutchen, Pittsburgh	19.2%
4. Evan Longoria, Tampa Bay	15%
5. Carlos Beltran, St. Louis	14.7%

1. Ryan Flaherty, Baltimore	16%
2. Brandon Belt, San Francisco	15.1%
3. Werth	15%
4. Matt Adams, St. Louis	14.1%
5. Eric Hosmer, Kansas City	13.6%

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1. Rasmus	29.2%
2. Valbuena	19%
3. Jose Bautista, Toronto	16.3%
4. David Wright, New York-N	15.6%
5. Chris Carter, Houston	15%

Thank you for reading my analysis. I try to combine my love of writing with my love of baseball, statistics, and analytics, and I hope to progress my skills in the coming years, as I move on to college next year, in hopes of landing a job in baseball operations.

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