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Biographical Sketch

Michael Lloyd received his B.S in Chemical Engineering in 1984 and accepted a position at Henderson State University in 1993 shortly after earning his Ph.D. in Mathematics from Kansas State University. He has presented papers at meetings of the Academy of Economics and Finance, the American Mathematical Society, the Arkansas Conference on Teaching, the Mathematical Association of America, and the Southwest Arkansas Council of Teachers of Mathematics. He has also been an Advanced Placement statistics consultant since 2002.

Statistical Oddities in Baseball History

Fred Worth, Ph.D.
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Abstract

When I was in first grade, I came home one day and explained to my mother how frustrated I was. They had not yet taught us how to do long division. That really bothered me because I wanted to be able to calculate batting averages for baseball players. So my mother taught me long division. Baseball is the ideal sport for people like me since statistics are far more a part of baseball than they are in any other sport. This paper is simply a list of some of the baseball statistical oddities I have found amusing over the years.

Players with at least 40 Home Runs but fewer than 100 Runs Batted In				
Player	**Year**	**Team**	**HR**	**RBI**
Duke Snider	1957	Dodgers	40	92
Mickey Mantle	1958	Yankees	42	97
Mickey Mantle	1960	Yankees	40	94
Harmon Killebrew	1963	Twins	45	96
Hank Aaron	1969	Braves	44	97
Rico Petrocelli	1969	Red Sox	40	97
Hank Aaron	1973	Braves	40	96
Davey Johnson	1973	Braves	43	99
Darrell Evans	1985	Tigers	40	94
Matt Williams	1994	Giants	43	96
Ken Griffey Jr.	1994	Mariners	40	90
Barry Bonds	2003	Giants	45	90

Alfonso Soriano	2006	Nationals	46	95
Adrian Gonzalez	2009	Padres	40	99
Adam Dunn	2006	Reds	40	92
Adam Dunn	2012	White Sox	41	96

Players with most Home Runs but 20 or fewer Runs Batted In				
Player	**Year**	**RBI**	**HR**	**Team**
Randy Ruiz	2009	17	10	Blue Jays
Wayne Gross	1985	18	11	Orioles
David Ross	2003	18	10	Dodgers
Todd Greene	2002	19	10	Rangers
Russell Branyan	2008	20	12	Brewers
Todd Greene	2003	20	10	Rangers
Jason Bay	2013	20	11	Mariners
Sal Fasano	2005	20	11	Orioles

Players with the most Home Runs but fewer than N Runs Batted In				
N	**Player**	**Year**	**HR**	**RBI**
200	Barry Bonds	2001	73*	137
190	Barry Bonds	2001	73*	137
180	Barry Bonds	2001	73*	137
170	Barry Bonds	2001	73*	137
160	Barry Bonds	2001	73*	137
150	Barry Bonds	2001	73*	137
140	Barry Bonds	2001	73*	137
130	Mark McGwire	1997	58*	123
120	Jim Thome	2002	52	118
	Willie Mays	1965	52	112
	Mark McGwire	1996	52*	113
110	Barry Bonds	2000	49*	106
	Sammy Sosa	2002	49*	108
100	Alfonso Soriano	2006	46	95
90	Jim Edmonds	2003	39	89
	Norm Cash	1962	39	89
80	Hank Aaron	1972	34	77
70	Hanley Ramirez	2008	33	67
60	Mark Bellhorn	2002	27	56
	Glenallen Hill	2000	27	58
	Adam Dunn	2003	27	57
50	Ruben Rivera	1999	23	48
40	Mark Parent	1995	18	38
	Russ Branyan	2006	18	36
	Jeff Liefer	2001	18	39

30	Bill Schroeder	1984	14	25
20	Wayne Gross	1985	11	18
10	Luis Medina	1988	6	8
* if you follow baseball closely you know what the asterisk means				

Players with more than 100 Runs Batted In and Few Runs Scored				
Player	**Year**	**Team**	**R**	**RBI**
Gus Bell	1959	Reds	59	115
Vic Wertz	1960	Red Sox	45	103
Danny Tartabull	1996	White Sox	58	101

Players with more than 100 Runs Batted In and No Home Runs				
Player	**Year**	**Team**	**HR**	**RBI**
Hughie Jennings	1896	Orioles	0	121
Lave Cross	1902	Athletics	0	108

Players with more than 100 Runs Batted In and One Home Run				
Player	**Year**	**Team**	**HR**	**RBI**
Farmer Vaughn	1893	Reds	1	108
Jack Doyle	1896	Orioles	1	101
Cupid Childs	1896	Spiders	1	106
Kid Gleason	1897	Giants	1	106
Bill Sweeney	1912	Braves	1	100

Only players with 0 HR and 0 SB with at least 450 AB (season)					
Player	**year**	**HR**	**AB**	**SB**	**Team**
Dick Groat	1956	0	520	0	Pirates
Lee Tannehill	1911	0	516	0	White Sox
Emil Verban	1944	0	498	0	Cardinals
Hal Lanier	1969	0	495	0	Giants
Sadie Houck	1884	0	472	0	Athletics
Bill McClellan	1885	0	464	0	Dodgers
Pop Smith	1885	0	453	0	Alleghenys
Jerry McCormick	1884	0	452	0	Keystones/Expos

Only players with 0 HR and 0 SB with at least 1000 career AB				
Player	**AB**	**HR**	**SB**	**Team(s)**
Jumbo Latham	1277	0	0	Grays/Athletics/Colonels
Mike McGeary	1252	0	0	Brown Stockings/Grays/Blues/ Wolverines
Dave Eggler	1247	0	0	Athletics/Cubs/Bisons/Orioles/Bisons

Only players with 0 HR and 0 SB with at least 1000 career AB

Player	Year	AB	3B	SB	Team
Cecil Fielder	1991	624	0	0	Tigers
Victor Martinez	2013	605	0	0	Tigers
Kendrys Morales	2013	602	0	0	Mariners
Mark Teixeira	2010	601	0	0	Yankees
Billy Butler	2010	595	0	0	Royals
Cecil Fielder	1992	594	0	0	Tigers
Adrian Gonzalez	2010	591	0	0	Padres
Billy Butler	2013	582	0	0	Royals
Deron Johnson	1971	582	0	0	Phillies
Paul Konerko	2005	575	0	0	White Sox

Players with the most At Bats and fewer than 10 Triples and Stolen Bases (career)				
Player	**AB**	**3B**	**SB**	**Team(s)**
Paul Konerko	8185	8	9	Dodgers/Reds/White Sox
Cecil Fielder	5157	7	2	Blue Jays/Tigers/Yankees/ Angels/Indians
Ramon Hernandez	5105	8	9	A's/Padres/Orioles/Reds/ Rockies/Dodgers
Victor Martinez	4884	3	4	Indians/Red Sox/Tigers
Bengie Molina	4812	6	3	Angels/Blue Jays/Giants/ Rangers
Scott Hatteberg	4226	7	3	Red Sox/A's/Reds
Gus Triandos	3907	6	1	Yankees/Orioles/Tigers/Phillies/Astros

Most home runs in a season in which all of the player's RBIs were himself	
J.R. House, 2007	3
Jorge Sosa, 2006 (pitcher, had only 3 hits)	3
Jim Gott, 1985 (pitcher)	3
Rob Deer, 1984	3
Jim Tyrone, 1974 (81 ABs)	3
Ned Yost, 1981	3
Dixie Howell, 1957 (pitcher, previous year, 2 HR, 3 RBI)	3

Pitchers who allowed more than one hit in a season in which all hits allowed were home runs. In each case, the number was two.	
Pitcher	**Year**
Paul Radford	1893
Fred Baczewski	1955
Jack Spring	1955
Bill Bradford	1956
Julio Navarro	1966
Bill Laxton	1970
Mike Smith	1985
Nerio Rodriguez	1999
Aneury Rodriguez	2012

Vladimir Nunez	2009
Bill Bradford is the only pitcher in history to allow two or more hits in a career with all of them HRs. He allowed the two shown above.	

Pitchers with the most Wins but fewer than 20 Innings Pitched				
Player	**YEAR**	**W**	**IP**	**Team**
Ray Herbert	1951	4	13	Tigers
Eric Bell	1991	4	18	Indians
George Sherrill	2005	4	19	Mariners

Things that don't lend themselves to short descriptions and tables

In 1939, on consecutive days, George Selkirk of the Yankees hit four homers and all four were against the A's Bob Joyce. "Twinkle Toes" touched Joyce for two on May 27th (second game) when Joyce was the starter and twice more when he pitched 3+ innings in relief the next day. (contributed by Ev Cope) Subsequent research by Dave Vincent produced a total of seven players who have done this.

Ed Delahanty	Adonis Terry	7/13/1896 (4 home runs)
Bobby Lowe	Ice Box Chamberlain	5/30/1894 (4)
Walt Dropo	Bud Daley	7/16/1959, 7/21/1959, 9/13/1959 (2nd game), 5/19/1960
Art Nehf (pitcher)	Johnny Stuart	7/29/1924 (2), 8/22/1924, 9/14/1924 (only had 8 career HRs)
George Selkirk	Bob Joyce	5/27/1939 (2 - 2nd game), 5/28/1939 (2)
Harry Stovey	Mickey Welch	9/14/1880, 9/17/1880, 9/21/1880 (2)
Hank Thompson	Gerry Staley	5/18/1954, 6/3/1954 (3)

This information, compliments of Madison McEntire, is players who had at least one season of 100 or more Runs Batted In and had the largest percentage of their career RBIs in that season.

Name	**Teams**	**career RBI**	**peak RBI**	**peak season**	**% of career in peak**
Ray Pepper	St. Louis (AL)	170	101	1934	59.41%
Bill Brubaker	Pittsburgh	225	102	1936	45.33%
Buster Adams	Phil/St. Louis (NL)	249	109	1945	43.78%
Luis Olmo	Brooklyn	272	110	1945	40.44%

Keith McDonald is the only player in history to have two or more hits in his career with all of them home runs. He hit three. Three players did that in one season but they each had other hits in other seasons.

Brady Anderson hit 50 HRs in 1996. In his next two best seasons (out of 15) he COMBINED for 45 (21 and 24). 23.81% of his HRs were that year even though only 8.91% of his ABs were that year.

Darin Erstand had 240 hits in 2000 (tied for 13th best season ever). His next best season (out of 14) was 177. 35.59% better than his second best season.

In 13 seasons, Dave Johnson hit 136 HRs. He hit 43 of them in 1973. So he had 31.62% of his HRs in a season where he had 11.65% of his ABs. His next THREE best seasons combined produced 43 HRs.

In 1972, Nate Colbert had 111 of the San Diego Padres team total 452 RBIs. That is 24.56%. The next THREE best combined for 127.

Bob Elliott had 131 walks in 1948. That is more than 50% more than he had in any other season.

Willie Mays never led the league in RBIs, but in 1962 had 141 (leader was Tommy Davis - 153) - 141 would have led the National League in 114 years of its 138 year existence.

Over 14 seasons and 5530 ABs, Freddie Patek had a career total of 41 home runs. He never had more than 6 in one season, and that only once. But he hit 3 HRs in one game on 6/20/1980 (only 5 all season).

Over 14 seasons and 7588 ABs, Maury Wills had a career total of 20 home runs. He never had more than 6 in one season, and that only once (only one other season with at least 4). But he hit 2 HRs in one game on 5/30/1962. Those were his 2nd and 3rd career HRs, and 1962 was his 4th season. (Norm Ginsberg)

In Polo Grounds history (1880 - 1963 ... several seasons with two teams), from 1880-1962, only 1 player (Joe Adcock) homered into the center field bleachers. In 1963 (back-to-back days), Lou Brock and Henry Aaron repeated this feat. (Norm Ginsberg)

Johnny Cooney had two career HRs in 3372 ABs, but they were on consecutive days (not consecutive games - second was in second game of doubleheader).

In 1927, Lloyd Waner and 27 RBIs and 133 R. Only player in history with at least 100 more R than RBI. (Cliff Otto)

Larry Jaster in 1966 pitched in 5 games against the Dodgers. In each he pitched a complete game shutout. Those were the only shutouts he had all year, and he only had one other complete game. The Dodgers were the World Champions that season. He had a 0.00 ERA obviously against the Dodgers but a 4.64 against the other teams. (Steve Boren)

Biographical Sketch

Fred Worth received his B.S. in Mathematics from Evangel College in Springfield, Missouri in 1982. He received his M.S. in Applied Mathematics in 1987 and his Ph.D. in Mathematics in 1991 from the University of Missouri-Rolla. He has been teaching at Henderson State University since August 1991. He is a member of the Society for American Baseball Research and the Mathematical Association of America. He hates the Yankees.

Justice Roulette: Dubious Tests of Truth and Sanity in Aurora Massacre Case

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Abstract

Aurora, Colorado, Judge William Sylvester ruled authorities can use truth serum and polygraphy to determine if the July movie theater shooting suspect is genuinely insane. This article details the extensively documented and empirically identified shortcomings in each of the so-called "truth serums" most commonly used, and similarly looks at polygraphy's poor accuracy rate in lie detection, reasons some investigators use it anyway, and why its results are generally inadmissible in court. A truth serum is not a truth serum; it lowers inhibitions. A lie detector is not a lie detector; it indicates stress patterns. In the end, looking at the inadequacy in methods of lie detection raises more questions about their usage in this court case than it answers, most notably one regarding the original point of it all: What does any of it have to do with showing beyond a reasonable doubt that a mass murderer is insane?

Justice Roulette: Dubious Tests of Truth and Sanity in the Aurora Massacre Case

Aurora, Colorado, Judge William Sylvester ruled that authorities may administer a so-called "truth serum" to the July movie theater shooting's defendant in order to determine whether or not he is genuinely insane, should he enter a plea of not guilty by reason of insanity. "It shall also be permissible to conduct a narcoanalytic interview of you with such drugs as are medically appropriate, and to subject you to polygraph examination," Sylvester wrote in his ruling (Franklin, 2013). The counsel for the defense moved unsuccessfully to oppose.
A truth serum is not a truth serum. It lowers inhibitions. A lie detector is not a lie detector. It indicates stress patterns.

"It's an extraordinarily unusual procedure to use," Columbia University professor of psychiatry, Steven Hoge, told ABC (Ng, 2013). "The fact that they've linked it to the use of polygraph makes me concerned that they do believe that it is indeed a 'truth serum,' and there's no evidence to support that."

The judge's order did not specify which chemical might be used as the supposed truth serum. The substances most commonly referred to, and contemporarily used, as truth serums are sodium amytal (amobarbital) and sodium pentothal (thiopental), barbiturates with disinhibiting effects. Both have suffered blows to their credibility for, among other things, fostering false