#### MMA Judge Decision Analysis

How do we evaluate MMA Judges Decisions?

- 1. We could look at kicks, punches and control
- We could look at frequency of round scores where judges diverged from the majority opinion, we aimed to uncover patterns that might indicate potential inconsistencies or biases in judging.

We will evaluate judges decisions by the second, and we will name this metric "In Minority". We will take a look at how often a judge disagrees with other MMA judges when scoring rounds.

#### Aggregated "In the Minority" Ratio for MMA Judges

#### average\_judgeb

Year	In Minority
2009	0.045
2010	0.007
2011	0.066
2012	0.079
2013	0.08
2014	0.067
2015	0.08
2016	0.062
2017	0.068
2018	0.068
2019	0.064
2020	0.07
2021	0.071
2022	0.07
2023	0.064
2024	0.078

# In Minority Career Stats

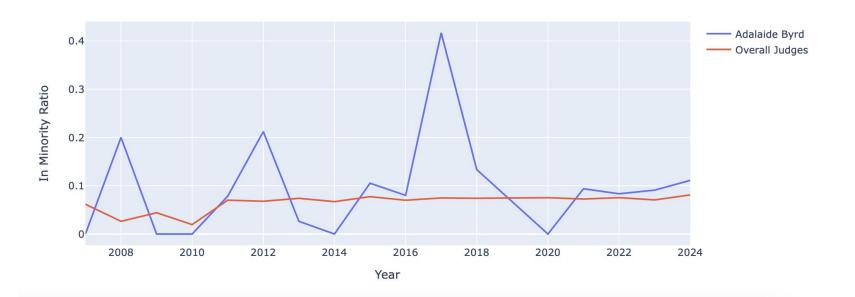
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Judge Name	In Minority Ratio	Total Rounds Judged	In Minority Count	
Barry Luxenberg	0.208	72	15	
Munah Querido	0.137	51	7	
Howie Booth	0.131	61	8	
Albert Shen	0.13	92	12	
<b>Burt Clements</b>	0.125	72	9	
Barry Foley	0.125	152	19	
Jerin Valel	0.123	220	27	
Mike Williams	0.116	69	8	
Gabriel Sabaitis	0.115	61	7	
Nate Mann	0.111	54	6	
Gino Garcia	0.109	55	6	
Felicia Oh	0.106	66	7	
Don Turnage	0.104	77	8	
David Sutherland	0.103	87	9	
Todd Anderson	0.103	68	7	
Steve Weisfeld	0.1	60	6	
Joseph Terrell	0.1	90	9	
Charlie Keech	0.098	163	16	
Will Fisher	0.095	63	6	
Garth Harriman	0.093	75	7	
Barry Oglesby	0.092	98	9	
Bartlomiej Czajka	0.092	98	9	
Anthony Maness	0.091	230	21	
Mark Craig	0.091	55	5	
Adalaide Byrd	0.091	680	62	

# Adelaide Byrd compared to All Judges Over Time



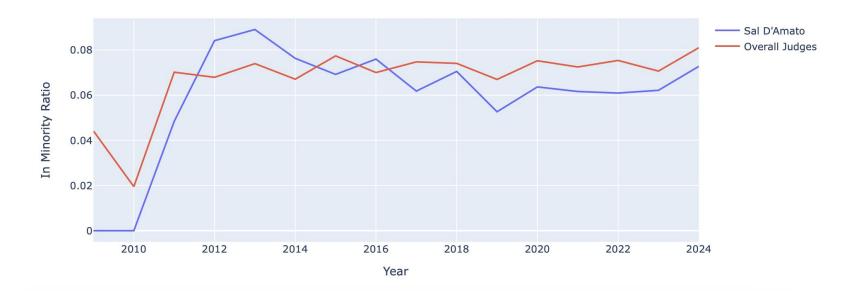
In Minority Ratio Over Years for Adalaide Byrd



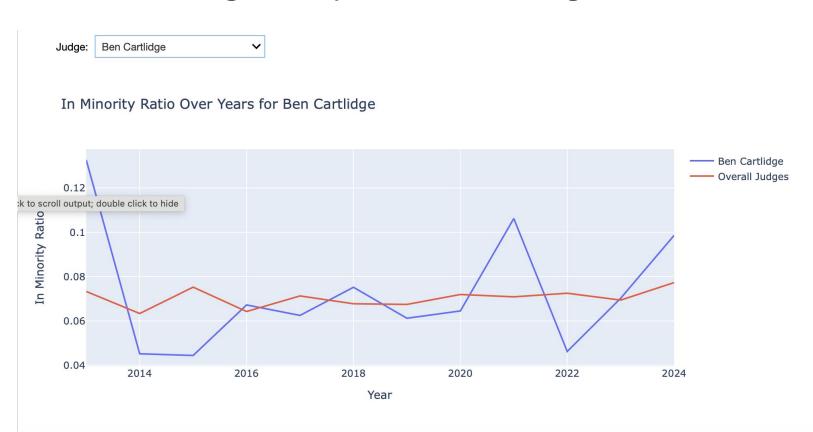
### Sal D'Amato compared to All Judges Over Time



In Minority Ratio Over Years for Sal D'Amato



## Ben Cartlidge compared to All Judges Over Time



## Derek Cleary compared to All Judges Over Time

Judge: Derek Cleary

In Minority Ratio Over Years for Derek Cleary



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Year	: 2024		
	Judge Name	Year	In Minority Ratio
135	Derek Cleary	2024	0.130435
136	Adalaide Byrd	2024	0.111111
137	Ben Cartlidge	2024	0.098592
138	Junichiro Kamijo	2024	0.090909
139	Chris Lee	2024	0.075000
140	Sal D'Amato	2024	0.072727
141	David Lethaby	2024	0.071429
142	Eric Colón	2024	0.059701
143	Michael Bell	2024	0.030612

Year	: 2023		
	Judge Name	Year	In Minority Ratio
125	Jacob Montalvo	2023	0.136364
126	Felicia Oh	2023	0.133333
127	Rick Winter	2023	0.121212
128	Chris Leben	2023	0.098039
129	Jon Marigliano	2023	0.095238
130	Adalaide Byrd	2023	0.090909
131	Eric Colón	2023	0.089286
132	Bryan Miner	2023	0.074534
133	Derek Cleary	2023	0.072797
134	Ben Cartlidge	2023	0.070248

Year	: 2022		
	Judge Name	Year	In Minority Ratio
115	Mike Williams	2022	0.151515
116	Clemens Werner	2022	0.127660
117	Steve Armstrong	2022	0.121212
118	<b>Anthony Maness</b>	2022	0.116883
119	Bartlomiej Czajka	2022	0.094340
120	Derek Cleary	2022	0.091270
121	Monika Ridgeway	2022	0.090909
122	Eric Colón	2022	0.088889
123	Dave Tirelli	2022	0.086207
124	Douglas Crosby	2022	0.084746

Year	: 2021		
	Judge Name	Year	In Minority Ratio
105	Jerin Valel	2021	0.205128
106	Marcel Varela	2021	0.147059
107	John Rupert	2021	0.128205
108	Filip Niemkowicz	2021	0.116279
109	Clemens Werner	2021	0.111111
110	Ben Cartlidge	2021	0.106195
111	Eric Colón	2021	0.096154
112	Szymon Bonkowski	2021	0.093750
113	Adalaide Byrd	2021	0.093750
114	Rick Winter	2021	0.089744

Year:	2020		
	Judge Name	Year	In Minority Ratio
95	David Lethaby	2020	0.145833
96	David Peabody	2020	0.128205
97	Steven Graham	2020	0.127273
98	Dave Hagen	2020	0.108108
99	Dave Tirelli	2020	0.103175
100	Jerin Valel	2020	0.101695
101	Chris Lee	2020	0.096970
102	Kevin Champion	2020	0.086957
103	<b>Greg DiVilbiss</b>	2020	0.086207
104	Vito Paolillo	2020	0.083333

Year: 2019 In Minority Ratio Judge Name Year 85 Paul Sutherland 2019 0.133333 86 Evan Field 2019 0.133333 87 Dave Hagen 2019 0.128205 88 Dave Tirelli 2019 0.121019 Anthony Maness 89 0.117647 2019 Lukasz Porebski 90 2019 0.117647 2019 91 Cezary Wojciechowski 0.111111 92 Steven Graham 2019 0.106383 **Kevin Champion** 93 0.101695 2019 David Lethaby 94 2019 0.077295

Yea	r: 2018		
	Judge Name	Year	In Minority Ratio
75	Michael Bell	2018	0.164179
76	Glenn Trowbridge	2018	0.159091
77	Douglas Crosby	2018	0.120000
78	<b>Brian Puccillo</b>	2018	0.108108
79	Marcos Rosales	2018	0.104478
80	Mark Collett	2018	0.095238
81	Ben Cartlidge	2018	0.075188
82	Sal D'Amato	2018	0.070485
83	David Lethaby	2018	0.068182
84	Guilherme Bravo	2018	0.062500

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Judge Name	Year	In Minority Ratio	
Adalaide Byrd	2012	0.212	
Jerin Valel	2021	0.205	
Aaron Chatfield	2012	0.182	
Dave Hagen	2011	0.167	
Michael Bell	2018	0.164	
Glenn Trowbridge	2018	0.159	
Cardo Urso	2015	0.153	
Barry Foley	2015	0.152	
Mike Williams	2022	0.152	
Marcel Varela	2021	0.147	
David Lethaby	2020	0.146	
Mark Collett	2015	0.136	
Jacob Montalvo	2023	0.136	
Mark Craig	2015	0.135	
Evan Field	2019	0.133	
Paul Sutherland	2019	0.133	
Ben Cartlidge	2013	0.133	
Felicia Oh	2023	0.133	
Guilherme Bravo	2013	0.132	
Derek Cleary	2024	0.13	
Lester Griffin	2011	0.128	
David Peabody	2020	0.128	
Clemens Werner	2022	0.128	
Dave Hagen	2019	0.128	
Vinicius Lins	2014	0.128	