2020 MLB ANALYSIS

How Individual Vizual Edge Scores Impacted MLB Performance In 2020

Working with Major League Baseball teams for the last 15 years has enabled Vizual Edge to complete a detailed breakdown of various trends between the core visual system and on-field performance statistics.

Over 15,000 Vizual Edge evaluations have been completed since 2011 by current or former Major League Baseball players or prospects. The primary sample of players within the database consists of high school or college players entering the amateur draft. The players represented are position players or designated hitters only, not pitchers.

During the truncated 2020 MLB regular season, 310 players had at least 100 PAs. 130 of those 310 players (42%) had previously completed a Vizual Edge baseline evaluation. By digging deeper into our database of the 130 'qualified' players, we looked at a variety of statistics and correlations found between MLB standard and advanced metrics, and average Vizual Edge baseline evaluation data. MLB statistics provided by FanGraphs.
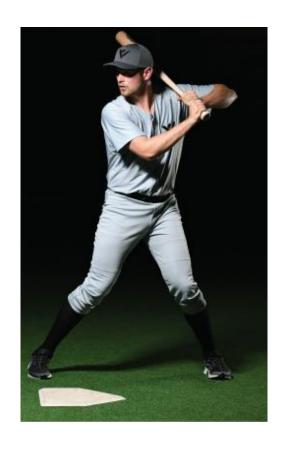
2020 MLB ANALYSIS
EDGE SCORE & MLB PERFORMANCE

VIZUAL EDGE
Winning is in Sight

The Edge Score is a **comprehensive score** out of 100 that takes the core-six visual skills into account, providing athletes, coaches and scouts with a benchmark number for assessing an athlete's overall visual ability.

In general, the higher the Edge Score, the more likely the player is to **make an impact in their sport.**

During the truncated 2020 MLB regular season, 310 hitters had at least 100 PAs. 130 of those 310 players (42%) had previously completed a Vizual Edge baseline evaluation. The table below outlines some of the key statistics* where MLB players performed in 2020 that had an average Edge Score evaluation score at various thresholds.

Edge Score (score out of 100)		# of Players	K%	BB %	O-Swing %	OBP	SLG %	HR %
72.0	At/Above	122	**23.7%**	9.1%	30.4%	**0.327**	**0.431**	**4.1%**
	Below	8	26.2%	9.8%	27.8%	0.317	0.409	4.0%
78.0	At/Above	86	23.9%	**9.3%**	30.4%	**0.332**	**0.439**	**4.3%**
	Below	44	23.9%	8.9%	30.0%	0.317	0.410	3.7%
81.0	At/Above	54	24.7%	**10.0%**	**29.4%**	**0.333**	**0.441**	**4.5%**
	Below	76	23.3%	8.6%	30.8%	0.323	0.421	3.8%
83.0	At/Above	37	**23.2%**	**9.8%**	**29.6%**	0.326	**0.432**	**4.5%**
	Below	93	24.1%	8.9%	30.5%	0.327	0.428	3.9%
89.0	At/Above	2	**20.2%**	**10.2%**	**29.3%**	**0.358**	**0.483**	**4.9%**
	Below	128	23.9%	9.2%	30.3%	0.326	0.429	4.1%

*2020 MLB stats provided by FanGraphs

2020 MLB ANALYSIS
CONVERGENCE & MLB PERFORMANCE

VIZUAL
EDGE
Winning is in Sight

Arguably the most important visual skill in baseball, convergence relates to a player's **ability to focus on an incoming object**. For hitters, this is critical in order to focus on a pitch as it approaches the final 15-20 feet to contact. Convergence is one of the more predictive visual skills in the Vizual Edge assessment, as it can help separate better hitters from average ones.

During the truncated 2020 MLB regular season, 310 hitters had at least 100 PAs. 130 of those 310 players (42%) had previously completed a Vizual Edge baseline evaluation. The table below outlines some of the key statistics* where MLB players performed in 2020 that had an average convergence evaluation station score at various thresholds.

Convergence (station score out of 77)		# of Players	K %	BB %	OBP	BABIP	SLG %	HR %
25	At/Above	96	**23.6%**	**9.4%**	**0.329**	**0.300**	0.428	4.0%
	Below	34	24.5%	8.5%	0.320	0.295	0.433	4.3%
35	At/Above	67	**23.5%**	**9.5%**	**0.331**	**0.300**	**0.432**	**4.2%**
	Below	63	24.3%	8.9%	0.323	0.297	0.426	4.0%
45	At/Above	36	**23.8%**	**9.8%**	**0.335**	**0.303**	**0.436**	**4.3%**
	Below	94	23.9%	8.9%	0.323	0.297	0.427	4.0%
55	At/Above	20	**23.4%**	**9.8%**	**0.333**	**0.303**	0.426	4.1%
	Below	110	23.9%	9.1%	0.326	0.297	0.430	4.1%
60	At/Above	8	**21.6%**	**9.3%**	**0.339**	**0.314**	**0.440**	**4.2%**
	Below	122	24.0%	9.2%	0.326	0.297	0.429	4.1%

*2020 MLB stats provided by FanGraphs

2020 MLB ANALYSIS
DIVERGENCE & MLB PERFORMANCE

VIZUAL EDGE
Winning is in Sight

Divergence plays an important role in a hitter's ability to **locate the ball out of the pitcher's hand**. When fielding, divergence helps a player locate the ball from a distance as it leaves the bat.

Having a quicker ability to locate the ball allows a hitter with more time to prepare for an incoming pitch, which is why there are higher walk rates & better outside-swing percentages. In addition, divergence correlates to a hitters power metrics (SLG % & HR %).

During the truncated 2020 MLB regular season, 310 hitters had at least 100 PAs. 130 of those 310 players (42%) had previously completed a Vizual Edge baseline evaluation. The table below outlines some of the key statistics* where MLB players performed in 2020 that had an average divergence evaluation station score at various thresholds.

Divergence (station score out of 77)		# of Players	BB %	O-Swing %	OBP	BABIP	SLG %	HR %
15	At/Above	101	**9.3%**	**30.2%**	0.326	0.294	**0.435**	**4.4%**
	Below	29	8.6%	30.3%	0.329	0.314	0.410	3.2%
20	At/Above	76	**9.5%**	30.3%	0.325	0.291	0.427	**4.3%**
	Below	54	8.8%	30.2%	0.330	0.308	0.432	3.8%
25	At/Above	49	**9.9%**	**28.8%**	**0.330**	0.296	0.421	4.1%
	Below	81	8.8%	31.1%	0.325	0.300	0.434	4.1%
30	At/Above	24	**10.1%**	**28.7%**	**0.339**	**0.303**	**0.440**	**4.4%**
	Below	106	9.0%	30.6%	0.324	0.297	0.427	4.0%
35	At/Above	11	**10.5%**	**28.6%**	**0.342**	**0.301**	**0.470**	**5.1%**
	Below	119	9.1%	30.4%	0.325	0.298	0.426	4.0%

*2020 MLB stats provided by FanGraphs

2020 MLB ANALYSIS
RECOGNITION & MLB PERFORMANCE

VIZUAL EDGE
Winning is in Sight

Hitters have roughly 0.30 seconds to react to an incoming pitch. Visual recognition plays a critical role in the speed and efficiency at which a hitter is able to **identify, process and react** to a pitch based on visual cues they see, such as pitch type and pitch location.

It is no surprise that hitters who had quicker recognition response times – performed better in several main hitting statistics.

During the truncated 2020 MLB regular season, 310 hitters had at least 100 PAs. 130 of those 310 players (42%) had previously completed a Vizual Edge baseline evaluation. The table below outlines some of the key statistics* where MLB players performed in 2020 that had an average recognition evaluation response time at various thresholds.

Recognition (Response Time in Seconds)		# of Players	BB %	O-Swing %	OBP	BABIP	SLG %	HR %
1.10s	At/Below	95	**9.5%**	**29.8%**	**0.331**	**0.298**	**0.439**	**4.4%**
	Above	35	8.5%	31.5%	0.320	0.295	0.403	4.3%
1.00s	At/Below	82	**9.5%**	**29.5%**	**0.328**	0.296	**0.437**	**4.4%**
	Above	48	8.6%	31.6%	0.324	0.302	0.417	3.6%
0.90s	At/Below	70	**9.5%**	**29.5%**	0.326	0.293	**0.433**	**4.3%**
	Above	60	8.8%	31.1%	0.328	0.304	0.425	3.8%
0.80s	At/Below	41	**9.6%**	**28.9%**	**0.331**	**0.301**	**0.444**	**4.5%**
	Above	89	9.0%	30.9%	0.325	0.297	0.423	3.9%
0.70s	At/Below	19	**10.5%**	**27.6%**	**0.335**	0.295	**0.451**	**4.7%**
	Above	111	9.0%	30.7%	0.325	0.299	0.426	4.0%

*2020 MLB stats provided by FanGraphs

2020 MLB ANALYSIS
TRACKING & MLB PERFORMANCE

VIZUAL EDGE
Winning is in Sight

Tracking is a foundational, critical visual skill for an athlete. Vizual Edge's tracking exercise measures the player's **ability to follow an object and quickly react**. On the diamond, tracking a fly ball in the outfield is one instance where a player uses their tracking skills.

Without a tracking foundation, hitters may struggle to overcome slow reaction speeds or lack ability to follow the trajectory of a ball.

During the truncated 2020 MLB regular season, 310 hitters had at least 100 PAs. 130 of those 310 players (42%) had previously completed a Vizual Edge baseline evaluation. The table below outlines some of the key statistics* where MLB players performed in 2020 that had an average tracking evaluation response time at various thresholds.

Tracking (Response Time in Seconds)		# of Players	BB %	O-Swing %	OBP	BABIP	SLG %	HR %
0.60s	At/Below	107	**9.5%**	**29.6%**	**0.328**	0.297	**0.430**	**4.2%**
	Above	23	7.9%	33.1%	0.323	0.304	0.428	3.8%
0.57s	At/Below	99	**9.6%**	**29.4%**	**0.330**	0.298	**0.431**	**4.2%**
	Above	31	7.9%	32.8%	0.318	0.301	0.424	3.9%
0.55s	At/Below	87	**9.4%**	**29.4%**	**0.329**	0.298	**0.433**	**4.2%**
	Above	43	8.7%	31.9%	0.323	0.300	0.422	3.9%
0.50s	At/Below	44	**10.0%**	**29.6%**	**0.336**	**0.301**	**0.439**	**4.3%**
	Above	86	8.8%	30.6%	0.322	0.297	0.425	4.0%
0.48s	At/Below	27	**10.0%**	**29.5%**	**0.337**	**0.301**	**0.432**	4.1%
	Above	103	9.0%	30.4%	0.324	0.298	0.429	4.1%