2021 MLB PLAYER TRAINING IMPROVEMENTS

VIZUAL EDGE

Winning is in Sight

VIZUAL EDGE

TRAINING UPDATE
BY THE NUMBERS

VIZUAL EDGE
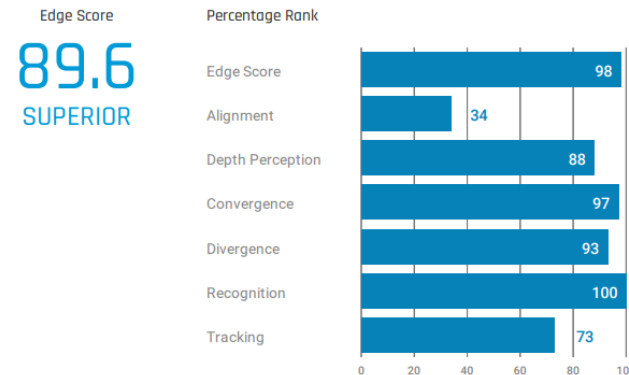*Winning is in Sight*

- 122 training **sessions** through 10/8/2021

- 583 training **exercises** completed through 10/8/2021
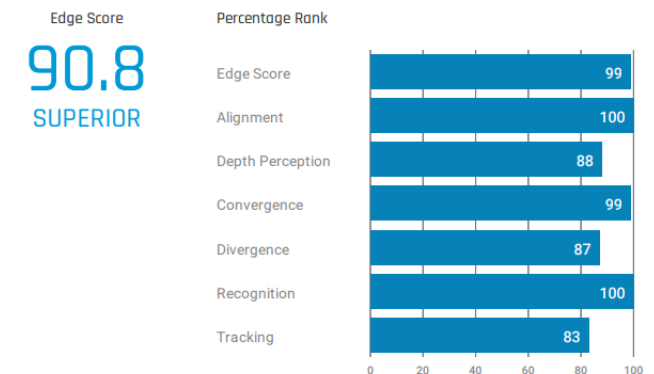
- Edge Score improvement: **+8.9%**

Baseline Evaluation (2/9/2021)
Pro Baseball Percentile Ranks

Edge Score
83.4
EXCELLENT

Percentage Rank

Category	Rank
Edge Score	77
Alignment	62
Depth Perception	75
Convergence	80
Divergence	63
Recognition	65
Tracking	68
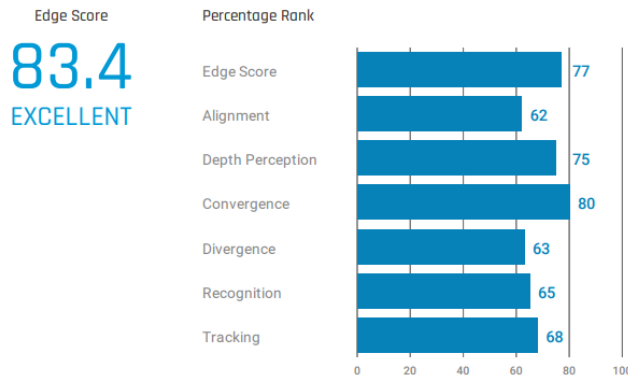
2nd Evaluation (4/4/2021)
Pro Baseball Percentile Ranks

Edge Score
89.6
SUPERIOR

Percentage Rank

Category	Rank
Edge Score	98
Alignment	34
Depth Perception	88
Convergence	97
Divergence	93
Recognition	100
Tracking	73

Latest Evaluation (10/8/2021)
Pro Baseball Percentile Ranks

Edge Score
90.8
SUPERIOR

Percentage Rank

Category	Rank
Edge Score	99
Alignment	100
Depth Perception	88
Convergence	99
Divergence	87
Recognition	100
Tracking	83

7.4% Improvement

1.3% Improvement

8.9% Overall Improvement

2021 MLB STATISTICAL IMPROVEMENTS

PLATE DISCIPLINE

	PAs	K%	BB%
Pre-Training (2019 & 2020 Seasons)	208	16.8%	7.2%
Since Training (2021 season, % Improvement)	170	14.7% (-13%)	10.0% (+39%)

HITTING STATS

	ABs	2B	AVG	OBP	SLG	OPS+
Pre-Training (2019 & 2020 Seasons)	186	5	0.247	0.309	0.333	70
Since Training (2021 season, % Improvement)	149	10 (+100%)	0.302 (+22%)	0.382 (+24%)	0.369 (+11%)	105 (+50%)

VIZUAL EDGE
Winning is in Sight

THE CORE-SIX BASEBALL
VISUAL SKILLS

VIZUAL EDGE
Winning is in Sight

ALIGNMENT

Proper alignment enables the ability to perceive the true location of an object, rather than in front or behind it

- Bat contact & timing at the plate

CONVERGENCE

Ability to focus on objects within close proximity and judge their movement.

- Ability to focus on an incoming pitch & consistently hitting the ball hard

RECOGNITION

Ability to observe, process and recall a series of visual targets, and respond properly.

- Pitch identification, decision-making & overall baseball IQ

DEPTH PERCEPTION

Uses both eyes to locate objects in space to judge their distance, speed, and direction

- Timing & judging the spin, speed & trajectory of a pitch

DIVERGENCE

Ability to locate objects in the distance, impacting an athlete's ability to anticipate and react.

- Early pitch detection & locating the ball out of the pitcher's hand

TRACKING

Ability to follow an object while continuously monitor all other aspects of the game

- Overall reaction speed & tracking of a fly ball or pop up

THE VISION TRAINING
LEARNING CURVE PT. 1

The vision training learning curve for each of the core-six visual skills can be classified into three stages:

Orientation (Stage 1): Brief stage in which the athlete becomes acclimated to the training tools and instructions.

Conscious (Stage 2): The longest of the stages in which growth and improvement occurs; performance and ability grow at a variable rate with peaks and valleys

Automatic (Stage 3): Newly acquired visual skills no longer require conscious effort to accomplish, this allows for greater cognitive freedom while competing.

STAGE 3
AUTOMATIC CONTROL

STAGE 2
CONSCIOUS CONTROL

STAGE 1
ORIENTATION-CONFUSION

THE VISION TRAINING
LEARNING CURVE PT. 2

Stage 1
*Percentile Rank: **15th***

Stage 2
*Percentile Rank: **71st***

Stage 3
*Percentile Rank: **99th***

Convergence Training Learning Curve:

21-Year Old NCAA D1 Player Example

Training Station Score (y-axis: 0, 11, 22, 33, 44, 55, 66, 77)

Weeks 1-2   Weeks 3-8   Weeks 9+
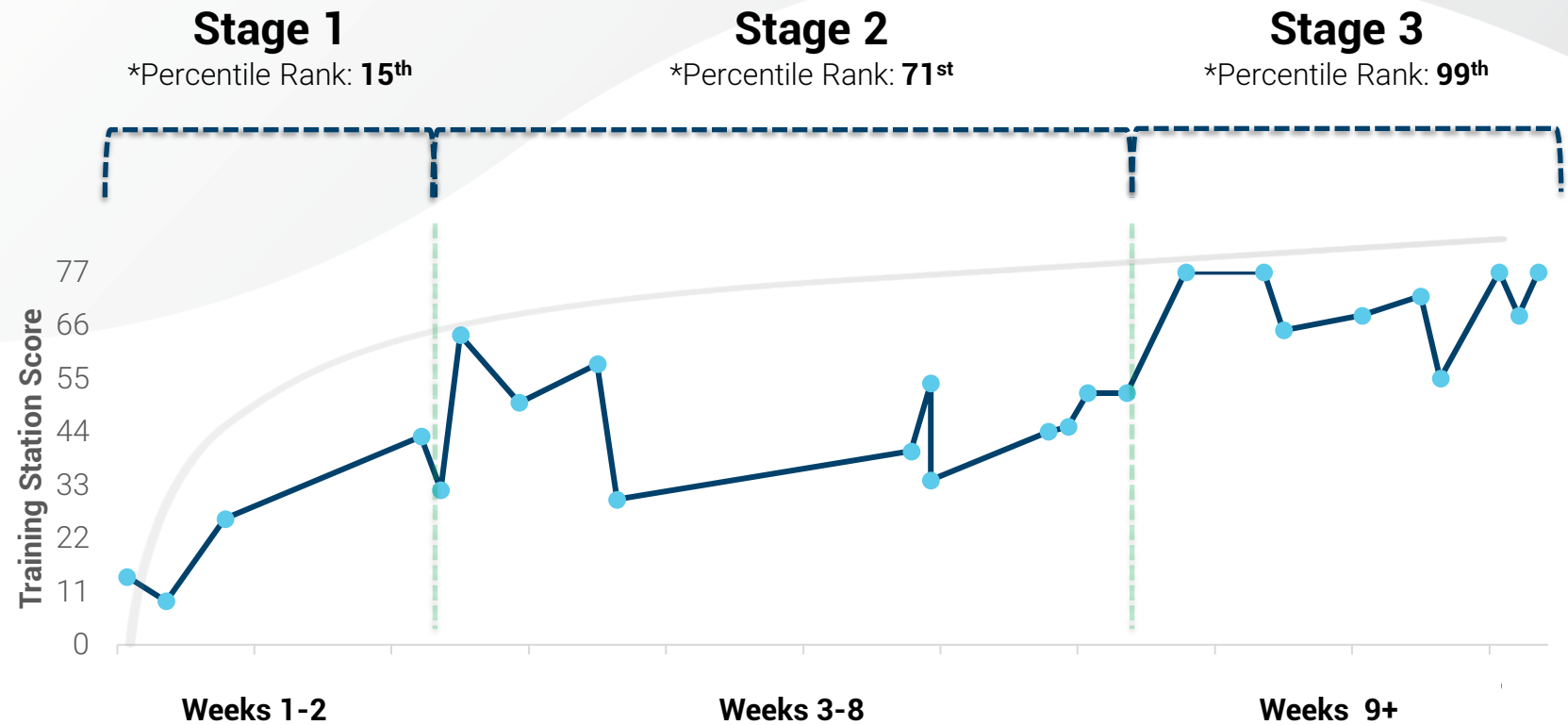
Training Timeline

*Percentile ranks based on weighted average training score. Results will vary.
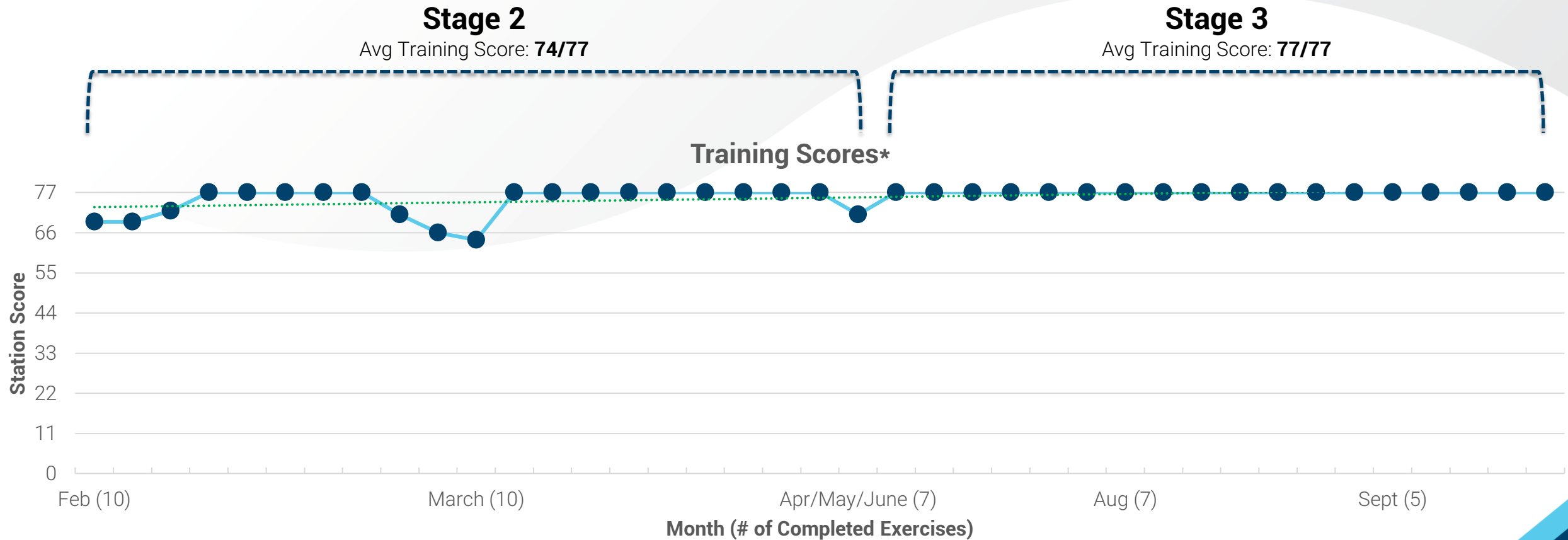
TRAINING OVERVIEW
CONVERGENCE

- **Convergence Application:** Ability to focus on incoming pitches during the final 10-15 feet to the plate. Score out of 77*

- 39 total Convergence training exercises completed (through 10/8/2021)

- **Baseline-Training Improvement**:
 **+17** (+31%)

*Scores weighted based on difficulty level

TRAINING OVERVIEW
DIVERGENCE

- **Divergence Application:** Ability to locate the ball out of the pitcher's hand and early pitch/spin detection. Score out of 77*

- 38 total Divergence training exercises completed (through 10/8/2021)

- **Baseline-Latest Eval Improvement**: **+10** (+60%)

*Scores weighted based on difficulty level

VIZUAL EDGE
Winning is in Sight
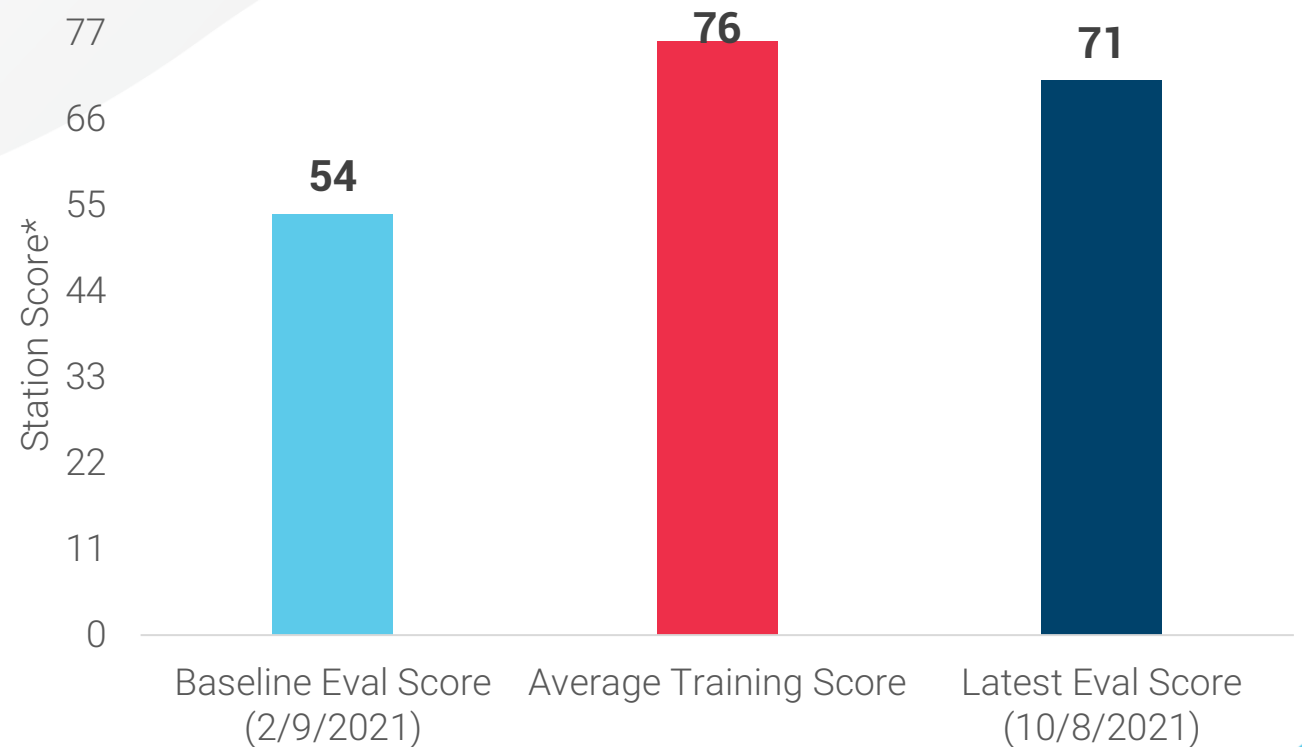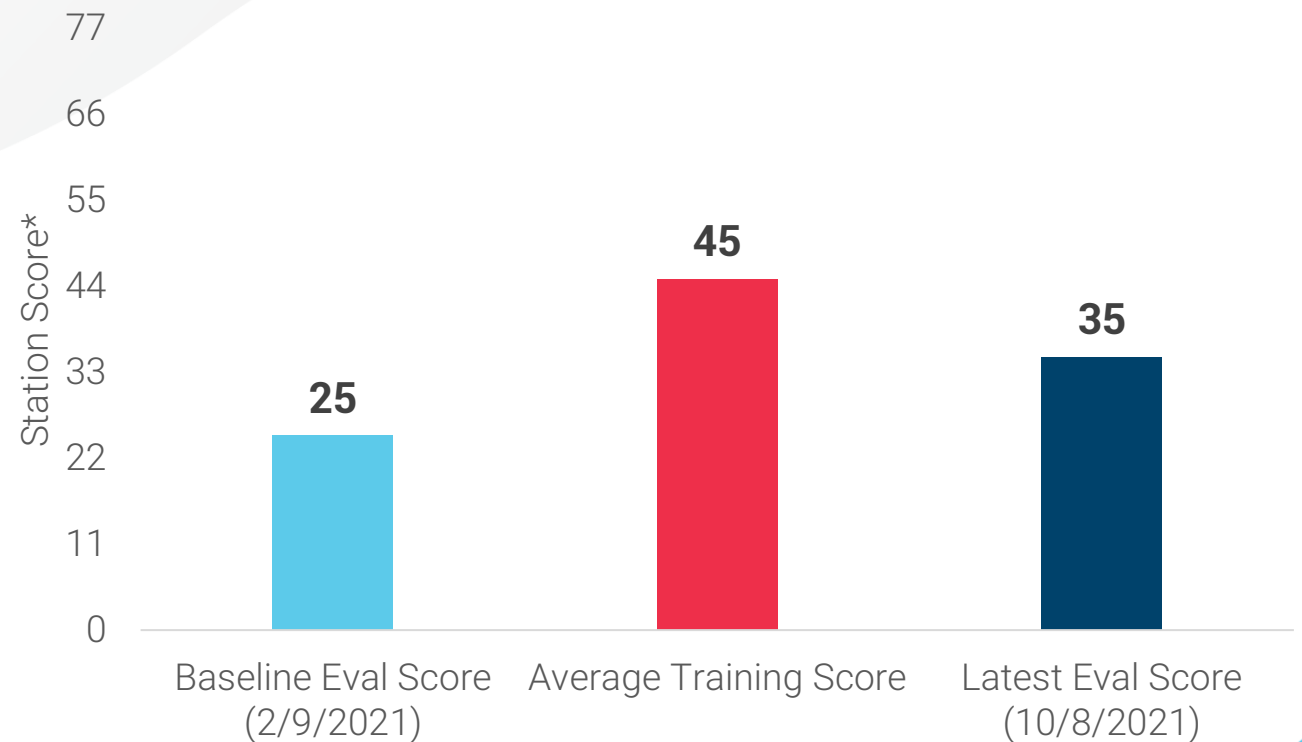
DIVERGENCE
TRAINING BREAKDOWN

VIZUAL EDGE
Winning is in Sight

Stage 1
Avg Training Score: **38/77**

Stage 2
Avg Training Score: **43/77**

Stage 3
Avg Training Score: **68/77**

Training Scores*

Station Score

77
66
55
44
33
22
11
0

Feb (9)   March (10)   Apr/May/June (7)   Aug (7)   Sept (5)

Month (# of Completed Exercises)

*Scores weighted based on difficulty level

TRAINING OVERVIEW
RECOGNITION

- **Recognition Application:** Overall visual processing skills, pitch identification, decision-making and baseball IQ. Score based on response time (seconds) and accuracy %.

- 232 total Recognition exercises completed (through 10/8/2021)

- **Baseline-Latest Eval Improvement*:**
  -0.44s (50% quicker)
  +4% Accuracy (96% -> 100%)

*Scores for standard 3 medium , 0.60s flash time arrow sequences only

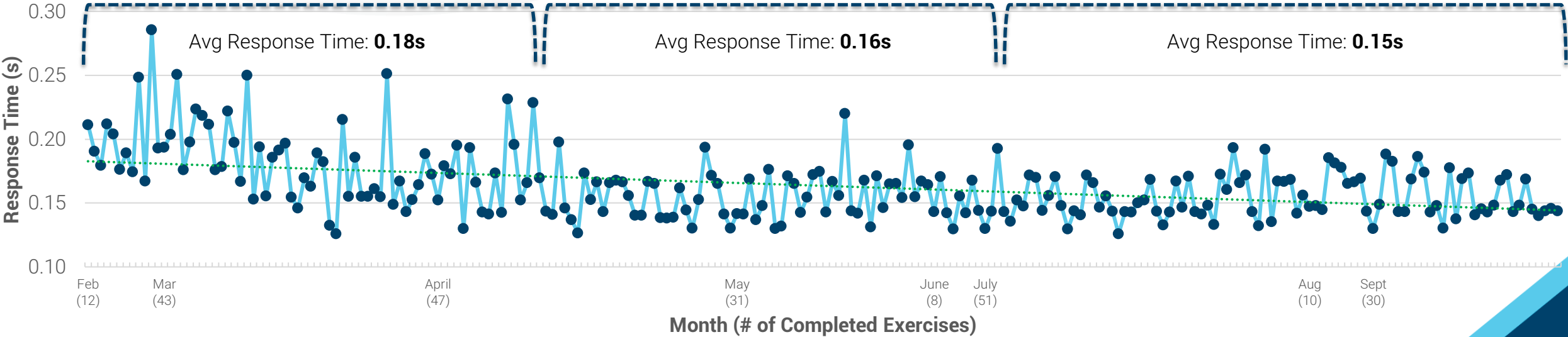**VIZUAL EDGE**
Winning is in Sight
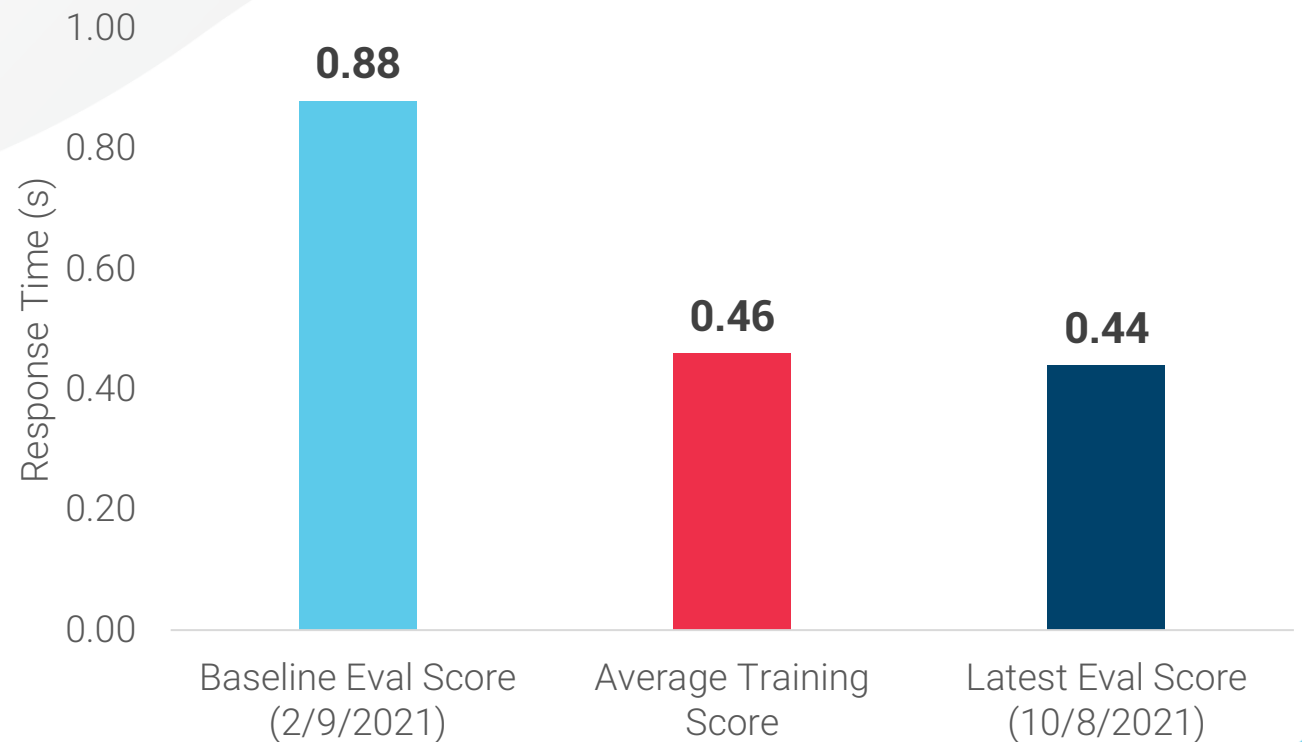
RECOGNITION – PER ARROW
TRAINING BREAKDOWN

When training recognition, the user will complete exercises with varying arrow size, arrow flash time and number of arrows in a given session (i.e. 3 arrows per sequence vs 5). The graph below shows the average response time (in seconds) per total number of arrows in a given sequence (Total Response Time / # of Arrows).

Using the average response time per arrow key better reflects the user's true processing speed and does not fault the user for typically having naturally slower overall response times, due to the total number of arrows needing to enter. Here we can see that the average response time per arrow has a downward trend over training time, suggesting quicker processing and overall response time per arrow key as a result of training.

Average Response Time Per Arrow

Avg Response Time: **0.18s**   Avg Response Time: **0.16s**   Avg Response Time: **0.15s**

Y-axis: Response Time (s) — 0.10, 0.15, 0.20, 0.25, 0.30

X-axis: Month (# of Completed Exercises) — Feb (12), Mar (43), April (47), May (31), June (8), July (51), Aug (10), Sept (30)

TRAINING OVERVIEW
TRACKING

- **Tracking Application:** Overall reaction speed and ball tracking skills. Score based on response time (seconds) and accuracy %.

- 215 total Tracking exercises completed (through 10/8/2021)

- **Baseline-Latest Eval Improvement***:
  -0.03s (6% quicker)

*Scores for standard medium arrow, 0.60s flash time, no fixation only