

MPE INDIVIDUAL CASE STUDY

Nick Lorusso

Infielder | University of Maryland

Performance Improvement Through Motor Preferences

Prepared by Motor Preferences Experts

Player Profile

Name

Nick Lorusso

Position

Infielder

School

University of Maryland

Conference

Big Ten

Before MPE — Big East (3 Years)

AVG .294 | Hits 94 | HR 5 | OBP .380 | RBI 49 | SLG .391

After MPE — Maryland (2 Years)

AVG .351 | Hits 183 | HR 41 | OBP .427 | RBI 175 | SLG .665

Initial Challenge

What the player was experiencing before MPE

Timing

Never consistently on time at the plate — constantly out and around the ball, crashing at contact.

Power

Decent numbers on the surface, but no power production. Felt stuck with no ability to access his true ceiling.

Injury

Dealing with recurring shin splints and hamstring strains — signs his body was being loaded against its natural movement pattern.

Training Direction

Had been coached to get in his legs more and load weight onto his back side — a prescription that worked directly against his Aerial profile.

Motor Preferences Profile

Assessment results — what Nick's body is wired to do

Aerial

Extension-based mover. Forefoot striker. Elastic and springy — designed for speed and rebound, not load and grind.

Horizontal

Naturally efficient with a flatter swing- pumping down and finishing more across his front shoulder.

Left Extension Leg

Left leg is his axis of rotation and also where it takes the least amount of resources to balance.

Large + Left Motor Shoulder

Needed to close his front shoulder in in his load and allow his hands to have space to work out in front.

Disassociated — Breathe Out

Top and bottom half move independently. Works best breathing out on the swing to activate the nervous system.

Back Motor Eye

Opening his stance slightly allowed his back eye to see. The primary function is to take in information and that helped his swing decision.

Intervention

What changed — drills, constraints, and training adjustments

Priority #1 — Establish Balance

The first priority was getting Nick to spend more time on #1 — his balance point. As an Aerial mover, his natural tendency was to skip past this phase and crash into his swing. The entire intervention started with creating consistent balance before anything else was layered in.

Drills & Constraints

Trout Step Over

Creates the feel of staying back and over the balance point before committing forward.

Forward Pull Constraint

Pulls Nick into his natural Aerial tendency — forward momentum with control, not crashing.

PVC Pipe Stride Limiter

Placed in front to shorten the stride and keep him from over-striding and losing balance.

Step Throughs

Reinforces the sequencing of balance → stride → swing rather than collapsing into contact.

Note: Once balance was established, upper body evaluation was the next step — much of the upper half cleans up naturally when the base is right.

Performance Outcomes

Big East (3 Years, Pre-MPE) → Maryland (2 Years, Post-MPE)

	Pre-MPE	Post-MPE	Change
Batting Average	.294	.351	+.057
Home Runs	5	41	+36
Slugging %	.391	.665	+.274
On-Base %	.380	.427	+.047
RBI	49	175	+126
Hits	94	183	+89

Home runs increased 8x • Slugging % improved by 270 points • RBI production more than tripled

Before & After

Video comparison — swing mechanics pre and post MPE implementation



Pre-MPE • Big East • .391 SLG • 5 HR



Post-MPE • Maryland • .665 SLG • 41 HR



"Motor Preferences helped me understand the why behind why some cues and drills have worked for me and why some don't. It gave me mental freedom to sift through all of the information that's out there. Understanding how I was built to move changed my career."

— Nick Lorusso | University of Maryland Baseball