Establishing Correct Habits in Discus & Rotational Shot

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Habits

• How do you change a habit?
• How do you create a habit?
• How do you know the habit is permanent?
• How do you make a new habit work in a pressure situation?
• Are the habits and solutions the same for an athlete that throws both discus and shot?
Addressing the Issue

- What is the best way to change your athlete’s habits?
  - Time line
  - How big is the issue?
  - How engrained is the bad habit?
  - How motivated is the athlete?
  - How coordinated is the athlete?
## Which approach?

<table>
<thead>
<tr>
<th>Whole Motion Changes</th>
<th>Part to Whole</th>
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</thead>
<tbody>
<tr>
<td>• Short amount of time</td>
<td>• Long term project</td>
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<tr>
<td>• Smaller changes</td>
<td>• Larger change</td>
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<tr>
<td>• Athlete can keep-</td>
<td>• More reps to make change permanent</td>
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<tr>
<td>◦ Rhythm</td>
<td>• The task is broken down into smaller parts and the athlete may be able to understand and complete the task more accurately.</td>
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<tr>
<td>◦ Tempo</td>
<td></td>
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<tr>
<td>◦ Timing</td>
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<tr>
<td>◦ Confidence</td>
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<td>• Used more effectively by the older athlete</td>
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Part to Whole

- Changes are more encompassing
- May affect all parts of the throw
- Establish more concrete habits and a deeper understanding of the movement for the athlete
- The new habit can be more entrenched and becomes more automatic in a pressure situation
Part to Whole At The Beginning Of The Season

- Stand throw is the first building block
- Add additional movements that lead the athlete into the correct Power Position
- The athlete will learn the correct rhythm, tempo, and timing with the new changes
Stand Throw

- Teach a delivery that mimics the delivery with a full motion
- Distance is usually compromised
- Athlete learns only one delivery
Stand Throw

- Rotation of hips
- Center of Mass on Right foot through delivery
- Hips creating rotational force horizontally
- Separation- hips are dragging implement/shoulders through to the delivery
- Timing- delivering the implement from the separated position
## Non-Reverse vs. Reverse

<table>
<thead>
<tr>
<th>Non-Reverse</th>
<th>Reverse</th>
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<tbody>
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<td>• Better feel and understanding of delivery</td>
<td>• The athlete may be able to mask a lot of problems with a reverse</td>
</tr>
<tr>
<td>• Athlete feels the ground, balance, and length of delivery with non-reverse</td>
<td>• A correct reverse will mimic the same feel and rhythm of a correct non reverse</td>
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Building on to the Stand

- Athlete must find the correct Power Position from each drill
  - Alignment
  - Size of base
  - Balance over right side
  - Height of hips
  - Separation
Building on to the Stand

- Drills and throws include:
  - Wheels, half turns, step ins
  - South Africans
  - Float, Float, Sting
  - Modified Fulls
  - Full throw
Building on to the Stand

- As the athlete learns to find a more correct Power Position from these drills they adjust their balance, positions, tempo, rhythm, and timing.
- Improvements are all encompassing and may take hundreds of repetitions.
- The task is broken down into smaller parts and the athlete may understand the task more precisely.
Ryan Whiting: Part to Whole

- High School Habits
  - Lean in out of the back
  - Lead with Left shoulder
  - Late off his Left foot
  - Landing opened up in Power Position
  - Short delivery
Ryan Whiting: Part to Whole

• Created a longer pull in stand throw

• Step ins- He learned how to tuck his left and land more separated, etc.

• South Africans- He learned how to get off his left quicker, etc.

• Fulls- He learned how to create rotational energy without falling off balance and leading with his left shoulder, etc.
Shot put and Discus Throwers

- Many of the motions are the same and the development can improve both events
- Some athletes feel and learn motions better with one event and then can apply this skill to the other event
- There are two main differences
  - Size of the ring
  - The carrying of the implement
Carrying of the Implement

- The shot is carried in the neck with the elbow up and back. The implement doesn’t move much within the throw.
- The discus is carried away from the body with arm back. Since the discus can move around it is much harder to control and there are many more variables.
  - Athlete must feel the discus throughout the throw
  - They must control the orbit of the discus
  - It takes more repetitions to time the delivery of the discus
Size of the Ring

- To accommodate the size of the ring, the athlete must adjust the entry of the throw.
- The entry of the discus will have a longer right leg into the middle of the ring with a little more lean of the body.
- The entry of the shot must have a more balanced axis on the Left and the sweep of the Right leg is shortened into the middle.
Teaching The Differences to Collegiate Throwers

- The coach may be able to emphasize the differences in the two throws with an athlete, but there may be other technical issues to address first.
- Taken on a athlete by athlete basis
- Jessica Pressley was a better shot putter than discus thrower. She threw 61’7” in the shot and 184’2” in the discus, but only used 7’ of the circle.
Executing

- After a successful implementation of part to whole development, the athlete should have a better understanding of the correct movement through a specific part of the throw.
- They now have a cue that triggers the correct feel of rhythm, tempo, and timing.
- This new cue can be implemented in the coaching of the athlete at practice and competitions.
Whole Motion Changes

- Short term solution
- Changes are usually smaller in nature and only affect part of the whole motion
- It is easier for the athlete to keep their rhythm, tempo, and timing of the full throw
- The athlete may have more confidence about adding the new motion and still throwing far
Domino Effect

- Throwing is a domino effect- An earlier motion has an effect on the later motions
- Starting from the entry of the throw, one mistake causes the next mistake
- Most bad throws end up with a bad delivery, yet the delivery is almost the last thing to fix.
- The solution? Fix the first mistake!
Prioritizing the Solutions

• The athlete must land in a good Power Position.
• If they are not, what is the main cause?
• If the athlete lands in a good Power Position, but is still missing the delivery,
  ◦ Is the athlete aware of their Power Position?
  ◦ Does the athlete have a good stand throw?
The Throw Is Always Changing

- Small, almost unnoticeable movements can become large problems over time.
- It is important to pay attention to details
- Know your thrower and their habits
- Know their comfortable, go-to movements
Ryan Whiting: Whole Motion

- One area that Ryan will always have to monitor is his wind up and entry.
- Several times through his collegiate career we put a big emphasis on learning and re-learning the correct entry.
- Now that he has several cues that help him re-establish the correct movement when the entry is off, he is much more efficient at whole motion changes.
Ryan Whiting Entry 2008vs2010
Questions?