Training Considerations for the Rotational Shot Put

Katie Souviney
Central Connecticut State University
souviney@ccsu.edu
• Sprints, Hurdles, & Jumps coach who had to start coaching the throws
• Coaching education (Pre and Post)
• Coaching mentors
• Never stop learning
• Facility and weather constraints
• Find what works for the athletes you coach
• Athletes trust is the most important factor in coaching
Advantages of rotational shot

- Increases range over which the shot can be accelerated
- Shot is carried through a longer distance which allows for a longer period to apply force
- Ability of athletes of smaller stature, strength levels, and body weight to achieve results
Biomotor Abilities

• Speed, Strength, Endurance, Flexibility, Coordination
• Train all biomotor abilities but proportionally different depending on the time of the year
• Coordination is essential to developing throwers
  • Balance, rhythm, technical execution
• For shot putters huge focus on NM development
  • Acceleration work, strength work, power
General Prep

• Endurance
  • building work capacity- circle, weight room
  • Med ball circuits, GS circuits with sprints

• Speed & strength addressed
  • Acceleration Development (10-30m range)
    • Hills, Stadiums, Sled Pulls
  • Strength addressed in the weight room
  • General Strength

• Coordination via drills
  • Freshman won’t throw an actual shot for first 6-8 weeks
  • Balance drills
Specific Prep

• Focus on strength development & coordination
  • Max Strength phase
  • Full throws with the implements

• Endurance decreases

• Speed addressed weekly
  • Acceleration development

• By the end of the phase need to be meet ready
Pre Comp

• Focus is on coordination & speed
• Start to phase out all the drills unless an athlete needs to revisit them

• Working on timing and rhythm of the throw
  • Athlete needs time to adjust to the competition shot and timing of the throw
  • For beginners- predominately use competition shot during technical days
  • More advanced athletes can use heavy and light implements and they are better able to adjust back to the timing of the competition shot
Comp Phase

• Focus on coordination
• Maintain levels in all other abilities

• Low volume of throws
• Drills are phased out, rehearsing full throws during technical days
• Preparation on the technical days tends to be comparable to highest level of competition warm up time frame
Coordination Development

• Coordination
  • Agility
  • Mobility
  • Balance - maintaining stability
    • MB Balance Drills, Static Balance Drills
• Motor Patterns
  • Need to be taught and integrate the new motor patterns
• Technical Execution
• Need to be very good at moving on single and double support
Critical Concepts- Rotational Shot Put

• Balance
  • Maintaining stability throughout the throw (single support/double support)

• Positioning
  • Postural alignment
  • Movement of limbs

• Rhythm
  • Uniform acceleration
  • Timing

• Technical Execution
Phases of the throw

- Wind Up
- Entry Phase
- Drive Phase
- Flight Phase
- Transition Position
- Delivery Phase
Wind Up

- Feet shoulder width apart
- Variations in knee bend between athletes
- Rotate torso keeping shoulders level
- Left foot, knee, and arm work in unison
- Right foot kept flat, left foot and knee rotate inward
Entry Phase

• Left foot, knee, hip turn as center of gravity shifts over left foot
• Right leg sweeps wide, lead with inner thigh
• Long left arm counters wide right leg
Drive Phase

- Right knee lifts across circle
- Left leg actively drives at same time as right knee lifts across circle
- Keep left arm long
- Timing of this phase is critical
  - If occurs too late will over rotate
  - If occurs too early will under rotate
Flight Phase

- Left arm relaxes and lowers
- Reposition yourself around the shot creating separation
- Left knee close to right knee
- Upper body tilts away from the sector
Transition Phase

- Right foot touches down and immediately pivots
- Left foot touches down after right
- Shoulders remain wrapped to back of the circle
- Torso should be over hips
- Weight should remain over right leg
Delivery

• Right foot continues to pivot towards middle of sector
• Actively drive upward, fully extending legs
• Keep chest up, shoulders and hips will rotate to middle of the sector
• Left arm will extend out towards throw
• Both feet will come off the ground
• Right arm will fire in sequence (shoulder, elbow, wrist)
Teaching progression

• Series of MB drills (perform 2-3x/week in general prep)
• Will only have the athlete use a MB
• Focus is on technical execution and feeling certain positions throughout the throw
• If can’t feel the positions at a slow velocity, will struggle to hit some positions at a fast velocity
• Gives context to the technique to progress them to the full throw
• Will not move forward to the next drill unless they are close to being proficient at the previous drill
MB Power Position
MB ½ Turns
MB ¼ Turn w/ pause drive across circle
MB ¼ Turn w/ pause to SA
Training Considerations

• All major technical changes need to take place during the fall
• 1st 6 -8 weeks of training freshman won’t touch the implements
• Focus on correct technique and fixing technical problems they acquired during high school
• Won’t let them throw the shot until they have the basics of the rotational technique down- relearn motor patterns
• Skill acquisition
• Whole vs Part practice
• Drills are to feel certain positions and postural alignment
• Athletes need to be meet ready before they leave for Christmas break
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  souviney@ccsu.edu