Training Strategies for a Successful Throws Program

Mohamad A Saatara
California
Assistant Coach – Throws
Training Strategies for a Successful Throws Program

• Set realistic short and long term objectives and testing
• Devise a systematic and unified technical model
• Develop an integrated training model
• Make effective exercise and implement selections
Training Strategies for a Successful Throws Program

- Set Realistic and relevant objectives so you have a clear road to success

<table>
<thead>
<tr>
<th>Generalized Goal</th>
<th>Specific Objective</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ex: Qualify for the NCAA Final Round in the men’s shot put</td>
<td>Ex: Achieve a mean performance &gt; 19.10m to improve chance of qualifying for the NCAA Final Round in mens’ shot put</td>
</tr>
<tr>
<td></td>
<td>Achieve best performance in first three rounds</td>
</tr>
</tbody>
</table>
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- Objectives must consider multiple performance factors:
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• Use appropriate and strong testing methods to monitor improvement and predict future performances

Tests for general fitness
Tests for maximal strength
Tests for maximal power
General throwing tests
Throwing exercises
Throws with implements
Practice comp
Comps

Least predictive
Most predictive
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• “Are you teaching your throwers what you want them to learn and do?”
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• Build a complete biomechanical understanding
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- Training model has to match technical model
- Training and technical models have to match the coach and athlete’s abilities and “comfort zone”
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• Unified training model
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<table>
<thead>
<tr>
<th>Indoor Season</th>
<th>Outdoor Season</th>
</tr>
</thead>
<tbody>
<tr>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

**Week 1**
- Day 1: General Warm-Up
- Day 2: Specific Warm-Up
- Day 3: specificity training

**Week 2**
- Day 1: General Warm-Up
- Day 2: Specific Warm-Up
- Day 3: specificity training

**Week 3**
- Day 1: General Warm-Up
- Day 2: Specific Warm-Up
- Day 3: specificity training

**Week 4**
- Day 1: General Warm-Up
- Day 2: Specific Warm-Up
- Day 3: specificity training

**Week 5**
- Day 1: General Warm-Up
- Day 2: Specific Warm-Up
- Day 3: specificity training

**Week 6**
- Day 1: General Warm-Up
- Day 2: Specific Warm-Up
- Day 3: specificity training

**Week 7**
- Day 1: General Warm-Up
- Day 2: Specific Warm-Up
- Day 3: specificity training

**Week 8**
- Day 1: General Warm-Up
- Day 2: Specific Warm-Up
- Day 3: specificity training

**Week 9**
- Day 1: General Warm-Up
- Day 2: Specific Warm-Up
- Day 3: specificity training

**Week 10**
- Day 1: General Warm-Up
- Day 2: Specific Warm-Up
- Day 3: specificity training

**Week 11**
- Day 1: General Warm-Up
- Day 2: Specific Warm-Up
- Day 3: specificity training

**Week 12**
- Day 1: General Warm-Up
- Day 2: Specific Warm-Up
- Day 3: specificity training

**Week 13**
- Day 1: General Warm-Up
- Day 2: Specific Warm-Up
- Day 3: specificity training
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- Exercise selection has to match technical and training model
- Don’t mistake use of specialized exercises with a lack of maximal strength and power work

<table>
<thead>
<tr>
<th>Strength exercises for shot putters 1998-2018 over 18.00m</th>
<th>oldest 34 youngest 20</th>
</tr>
</thead>
<tbody>
<tr>
<td>18-18.5 = 6 18.5-19 = 3 19-19.5 = 2 19.5-20 = 3 20+ = 2</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>exercise</th>
<th>N</th>
<th>Mean</th>
<th>Max</th>
<th>min</th>
</tr>
</thead>
<tbody>
<tr>
<td>Competition throw</td>
<td>16</td>
<td>19m</td>
<td>20.78m</td>
<td>18.01m</td>
</tr>
<tr>
<td>Power clean</td>
<td>16</td>
<td>169kg</td>
<td>195kg</td>
<td>130kg</td>
</tr>
<tr>
<td>Power snatch</td>
<td>16</td>
<td>120kg</td>
<td>145kg</td>
<td>90kg</td>
</tr>
<tr>
<td>Push press</td>
<td>16</td>
<td>177kg</td>
<td>230kg</td>
<td>140kg</td>
</tr>
<tr>
<td>Bench press</td>
<td>16</td>
<td>421lbs</td>
<td>525lbs</td>
<td>330lbs</td>
</tr>
<tr>
<td>squat</td>
<td>16</td>
<td>548lbs</td>
<td>650lbs</td>
<td>440lbs</td>
</tr>
</tbody>
</table>
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### Correlation with competitive movement:

<table>
<thead>
<tr>
<th>General athletic exercises</th>
<th>Heavy strength exercises</th>
<th>Explosive exercises</th>
<th>Drills and throwing exercises</th>
<th>Variable weight implements</th>
<th>Training with competition Implement</th>
<th>Competitive throw</th>
</tr>
</thead>
</table>

### Velocity of movement:

<table>
<thead>
<tr>
<th>Maximal Strength exercises</th>
<th>Exercises for maximal power</th>
<th>Throwing exercises with heavy implements</th>
<th>Throwing competition implements</th>
<th>Throwing lighter implements</th>
</tr>
</thead>
</table>

### Complexity of movement:

<table>
<thead>
<tr>
<th>Two dimensional exercises</th>
<th>Three dimensional exercises</th>
<th>Throwing exercises</th>
<th>Partial throwing movements</th>
<th>Full throws</th>
</tr>
</thead>
</table>
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• Exercise impact on the athlete

- Slower exercises and drills
- Plyometric and jumping exercises
- Throwing with light implements
- Throwing with competition weight
- Throwing with heavy implements
- Weight lifting exercises
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• Variable weight impalements
  • General view is that there is a linear relationship between weight and distance thrown – this is not the case
  • Grouping of implements impacts relationship
  • Certain weights have more affinity for improvement than others
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- Variable weighed implements don’t always have a linear relationship
- Little technical variation between different implements

<table>
<thead>
<tr>
<th></th>
<th>20lbs shot</th>
<th>18lbs shot</th>
<th>16lbs shot</th>
<th>5kg shot</th>
</tr>
</thead>
<tbody>
<tr>
<td>Distance</td>
<td>~17m</td>
<td>~18m</td>
<td>~19.30m</td>
<td>~23.5</td>
</tr>
</tbody>
</table>
Mohamad Saatara
University of California, Berkeley
Asst. Coach T & F
msaatara@Berkeley.edu
Training Strategies for a Successful Throws Program

- Division of training components:
  - Typical division of factors:

- Coordinated view: