CHARACTERISTICS TO DEVELOP

// SKILL

// MENTAL

// PHYSICAL
LONG-TERM ATHLETE DEVELOPMENT

PHYSICAL LITERACY
- Active Start
- Fundamentals
- Learning to Train

ACTIVE FOR LIFE
- Training to Train
- Training to Compete
- Training to Win

PHYSICAL DEVELOPMENT

- Anthropometrics
- Co-ordination
- Aerobic-Endurance
- Flexibility
- Fundamental Movements
- Balance
- Strength-Endurance
- Strength
- Power
- Speed
- Agility
- Reactive Strength Index

PHYSICAL LITERACY

- Active for Life
- Fun Damentals
- Learning to Train
- Training to Win

HANDBALL: PHYSICAL LITERACY

RECOMMENDATIONS (AGE 0–12)

1. Multi-Sport:
   Diverse exposure to different sports creates a broad base of skill and physical literacy

2. Fundamental Movements:
   Squatting, pushing, pulling, throwing, kicking

3. Gamify:
   Make Physical Training as fun as possible!
   - Athlete testing can be used as gamification tool
   - Healthy competition
   - Positive reinforcement
   - Identify those needed special attention
HANDBALL: BUILDING PHASE
RECOMMENDATIONS (AGE 13 – 18+)

1. BUILD-STRENGTH:
Strength development in fundamental movements acts as a base for later
development of speed, power and agility.

2. INTRODUCE GYM PROGRAMMES:
Builds confidence in process, athlete physical performance and competitive edge.

3. TEST & TRACK PERFORMANCE:
Quantify progress across key performance indicators:
• Talent Identification
• Objectivity & Athlete personalization
• Building blocks towards elite performance

HANDBALL: ATHLETE TESTING (AGE 13-18+)

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AIMS:
SUSTAINABLE DEVELOPMENT THROUGH ADOLESCENCE
MINIMUM THRESHOLDS TO BE MAINTAINED
ENSURE BALANCE, FLEXIBILITY IS MAINTAINED FROM PL PHASE

HANDBALL: ELITE PHASE
RECOMMENDATIONS (AGE 19+)

1. SPECIFICITY:
Focus on key position characteristics and movements

2. ADVANCED POWER AND STRENGTH DEVELOPMENT

3. TEST, TRACK AND MODERATE PERFORMANCE IN DETAIL

HANDBALL: ATHLETE TESTING (AGE 19+)

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AIMS:
MINIMISE INJURY RISK
PERIODIATION FOR PEAKING AT MOST IMPORTANT TIME POINTS
ELITE PERFORMANCE

MORE-REGULARLY + HANDBALL SPECIFIC VARIATIONS
6+ years of research:

• Premier League
• Major League Soccer
• Championship
• International
• International Pro-14
• Premiership
• AIL
• International Athletics
• Universities: EU & USA
• NHL Ice-Hockey
• Intercounty GAA
• Physio clinics
• S&C centres
• Gyms
• Secondary Schools

FUTURE USE OF SYSTEM DATA

• Deeper understanding of most important athlete characteristics (by position, gender etc.)
• Age-related recommendations for performance-measurement thresholds
• Stronger understanding on exercise programming to effectively develop measures

TAKE HOME MESSAGES

TESTING

• Validity
• Reliability
• Periodic
• Minimum thresholds

LONG-TERM S&C

• Sustainable
• Fundamentals
• Specialisation

OPTIMISE

• Readiness
• VBT
• Technique
• Tracking

Long-term physical development standards for handball
THANK YOU!!!