Assessments of Athletes and its Importance

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Need for testing

- Understand current status
- Understand lacunae in development
- Guide to improve training programs
- Feedback to the athlete
- Regular assessments to understand improvement and efficacy of training program.
Types of assessments

Basic assessments or field tests:
- Easy to administer
- Fairly reliable
- Cheap, fast and can be done regularly/repeatedly

Lab tests:
- Blood tests
- Exercise physiology tests like VO2 measurement, lactate test etc
- Biomechanical assessments like motion analysis, pressure plate, video analysis etc
Types of assessments

Other professional assessments-
- Psychological tests
- Nutritional assessment
- Specialised strength assessment using isokinetic devices or gym eqpt
Basic Assessments

To track improvements

To set a baseline for return post injury

To make sure there is no overtraining
Assessments

- BASAL HR
- SPEED
- ENDURANCE
- AGILITY
- FLEXIBILITY
- POWER
- BALANCE
Speed: 35 mts Sprint Test

- To check for acceleration and speed
- Stopwatch and marker cones
- 3 attempts after good warm up
Endurance: Beep Test

• Requirement: Beep test app, cones, measuring tape-20 mts
• Athlete has to cover the 20 mt distance before the next beep
• Record the last shuttle completed after 2 warnings
Agility: T Test

- Requirement: stop watch, measure tape and cones
- Set up (5 yards- 4.57 Mt, 10 yards- 9.14 mts)
Flexibility: Sit and Reach Test

• Requirement - a ruler

• Process:
  • Sit on the floor with legs extended
  • Reach forward

• Measure how far fingers can cross toes:
  + if the can
  – if they don’t
Power: Vertical Squat jump test

- Requirement - measuring tape, chalk
- Procedure:
  - Stand with hand extended-baseline
  - Jump from squat position
- Measure the difference for jump height
- Best of 3 attempts
Balance - Stork test

• Requirement - stop watch

• Procedure:
  • Position as in figure
  • Time starts when heel is raised
  • Stop the watch when position is not maintained

• Scoring:
Regular Assessments

- Basal HR (daily)
- Beep test (once in 3 months)
- Agility test (once a month)
- Jump test (once a month)
- Weight (twice a month to watch for abnormal drop)
- Match training to the feeling of fatigue.
High performance assessments

Meant for athletes already past their growth phase and performing well.

Includes:

- Exercise physiology tests like VO2 measurement, lactate test etc
- Biomechanical assessments like motion analysis, pressure plate, video analysis etc
**VO₂ max testing**

- Using a gas analyser
- Incremental test to exhaustion
- Should last between 10-15 minutes
- Expressed as oxygen consumed in ml/kg/min
Lactate Threshold test

- Using a Lactate meter and strips via a finger prick
- 4 minute sets at increasing speed with 1 min between sets for blood collection
- Speed is sub maximal
- Expressed as speed at Lactate threshold.
Specialised assessment

• Motion sensor assessment - Measure movement when shooting
• Helps identify what happens when you hit a good shot as compared to a bad shot
Further reading: TopendSports.com
Stay home, Stay safe
THANK YOU

A COACH WILL IMPACT MORE PEOPLE IN A YEAR THAN THE AVERAGE PERSON DOES IN A LIFETIME!