TRAINING PARAMETERS

Major (R) S. Maniam
Director of Coaching
World Squash Federation
OVERVIEW

► To compete at the elite level, athletes require to develop and be proficient in a range of attributes.

► Ideally players use a periodised approach to training for optimal long-term development, which allow them to sequentially develop these attributes over a desired period of time.
MODEL OF PLAYER DEVELOPMENT

► TECHNICAL SKILLS
► TACTICAL SKILLS
► PSYCHOLOGICAL SKILLS
► PHYSIOLOGICAL SKILLS
TECHNICAL SKILLS

TECHNICAL

► STRIKING AND MOVEMENT TECHNIQUES
► SOLO DRILLS
► TECHNICAL DRILLS IN PAIRS
► DRILLS WITH COACH
► CONDITIONED GAMES
► MATCH PLAY
► COMPETITION
TACTICAL SKILLS

- GAME ANALYSIS – NOTATIONAL AND VIDEO
- ERROR IDENTIFICATION AND CORRECTION
- TACTICAL DRILLS AND GAMES – TACTICAL REACTION DEVELOPMENT
- DECISION MAKING
PSYCHOLOGICAL SKILLS

- GOAL SETTING AND MOTIVATION
- RELAXATION
- VISUALISATION AND IMAGERY
- BREATHING TECHNIQUES
- COPING WITH STRESS
PHYSIOLOGICAL SKILLS

► COMPONENTS:
  - Cardiovascular Endurance
  - Muscular Endurance
  - Strength
  - Flexibility
  - Agility
  - Speed
  - Reaction time & Response Time
  - Balance – Static and Dynamic
  - Co-ordination
  - Power
LIFE SKILLS

- Nutrition
- Athlete Career Guidance
- Athlete Education Guidance
- Rest and Recovery Patterns
- Drugs – Counselling
PERIODISATION
"If you don't know where you are going, don't be surprised to arrive somewhere else."
In terms of sports performance, that means if you fail to plan the development of your athletes properly, you will not be able to maximize their potential.

This planning process in sports is called "Periodisation".
What is Periodisation

“...Periodisation is the process of dividing the annual plan into smaller phases of training...”

Tudor Bompa

“...Periodisation is a planning system to structure and organise a progression in training programs and methods to bring an athlete to a peak in performance during the main competitive season...”

Jeffrey Wollstein
PHASES

► PREPARATORY
  * GPP
  * SPP

► COMPETITIVE
  * Pre-Comp
  * Comp

► TRANSITION
PHASES

► Preparatory Period
  ▪ General Preparatory Phase
    ► Rehabilitation from existing injury
    ► Structural development
    ► Fitness foundation with cross-training
    ► Technical fault correction
    ► Varied technical practice
  ▪ Specific Preparatory Phase
    ► Sport-specific fitness and training
    ► Block technical practice
    ► Maintain high volume
PHASES

► Competitive Period
  - Pre-Competition
    - Lactate Training (if appropriate)
    - Taper
    - High intensity/low volume
    - Competition simulation
  - Competition
    - Maintenance of the components of performance
    - High intensity/very low volume
    - Focus on mental skills
PHASES

► Transition Period (off-season)
  ▪ Maintain fitness
    ► 30-50% of competition load
  ▪ Mental and Physical Rest
  ▪ Screenings
    ► Physical
    ► Psychological
    ► Career/Education
  ▪ Possibly fitness testing?
  ▪ Review year
  ▪ Goal setting
## Traditional Phases

### THE YEARLY PLAN

<table>
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<tr>
<th>Phases of Training</th>
<th>PREPARATORY</th>
<th>COMPETITIVE</th>
<th>TRANSITION</th>
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<td>Transition</td>
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A schematic illustration of the division of an annual plan into its phases and cycles of training (Bompa, 1983).

Maj(R)S. Maniam
Single Periodisation Plan

- Bompa’s plan for a single periodisation year

<table>
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<th>General</th>
<th>Specific</th>
<th>Early</th>
<th>Main</th>
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<tbody>
<tr>
<td>PREPARATION</td>
<td>COMPETITION</td>
<td>TRANSITION</td>
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</table>

A plan for a single periodisation year, suitable for individual sports (Bompa, 1983).
Periodisation for Perceptual Motor Skills

- **GPP**
  - Error Correction
  - Learning of new skills
  - Closed drills
  - Video Analysis
  - Movement Technique
- **SPP**
  - Open drills
  - Deception and Anticipation
  - Pressure Drills
  - Movement Technique
  - Understanding different game plans
Periodisation for Perceptual Motor Skills – cont’d

- **Pre-Competition**
- Conditioned Games
- Game plans
- Critical Games
- Match overload
- Match play
- Video Analysis
- Closed Drills
- Test matches
Periodization Of Mental Skills

- Introduction to the skill (Explain concept)
- Development of the skill in a quiet setting
- Incorporation of the skill in sport specific situation (Specific application)
- Refinement of the skill in training and in preparatory competition
- Integration of the skill in strategies of competition
- Use of the skill in competition to achieve IPS
Some of the mental skills

- Goal Setting
- Motivation
- Coping Strategy
- Visualization
- Concentration
- Self-Talk
- Relaxation
- Energizing (activation)
Periodisation for Physiological Skills

**GPP**
- Aerobic Build-up
- General Strength, Hypertrophy
- Fitness Test

**SPP**
- Speed and Agility
- Speed Endurance
- Maximum Strength
- Power – Conversion
- Plyometrics
- Fitness Test

**Pre-Comp**
- Lactate Training (1:3)
- Strength Endurance
- Taper
A long-term training plan needs the following elements:

- Correct and sufficient multilateral development prior to specialisation
- Appropriate training volume and intensity
- Correct periodisation
- Appropriate loading of the work progressively and sufficiently throughout the season and from year to year
- Correct balancing of the various modalities of training i.e., flexibility, trunk stability, resistance training (strength and power), endurance training (aerobic & anaerobic threshold training and lactate tolerance) and speed training
- Ensuring appropriate recovery between sessions in order to keep young athletes fresh
- Make it fun over the long term
SUMMARY

► Athletic Development is a complex procedure
► The holistic approach ensures that the programme is consistent and comprehensive
► Ensuring appropriate recovery between sessions in order to keep young athletes fresh
► Make it fun over the long term
► Effective and dedicated implementation ensures desired results