

NAČRTOVANJE IN IZVEDBA TENIŠKIH TRENINGOV



PLANNING THE TENNIS TRAINING

ITF Development Department

By the end of this session you should be able to:

- explain the definition and benefits of periodisation for tennis
- understand the general characteristics and phases of tennis planning
- devise effective and appropriate training and tournament planning for tournament tennis players

DEFINITION OF PERIODISATION

- Periodisation is the division of an annual plan into phases of training
- It is the splitting up of the year into smaller units each one with its own objectives to ensure the best possible chance of performing well at pre-determined times of the year

TENNIS CHARACTERISTICS

related to periodisation

- Tennis is one of the few sports without an off season
- This increases the risk of injury, getting stale or even burn out
- When performing at the highest levels of tennis, the focus of the training process should be on training in an efficient way

TRAINING IN AN EFFICIENT WAY



- Use the latest sport science information applied to tennis available.
- Design and implement an adequate training program
- Integration of coaching knowledge and the scientific basis of sport

PURPOSE OF PERIODISATION

- To balance the intensity and volume of stress with sufficient recovery
- To allow the player to train at the highest possible volume and intensity, yet remain below the level of overtraining

ASPECTS CONTROLLED BY PERIODISATION

- Volume: Amount of work performed
- Intensity: How hard the player works
- Frequency: How often the player trains
- Type: What area the player trains

ANNUAL PERIODS

- Preparation:
 - General
 - Specific
- Pre-competition
- Competition
- Transition:
 - Active
 - Rest

GENERAL PREPARATORY

- Increased amount of training
- High volume, low intensity
- Physical condition very important (endurance and strength)
- Technique (new skills and corrections)
- Competition: less tournaments
- 4 to 6 weeks

SPECIFIC PREPARATORY PERIOD

- Low volume, high intensity
- Physical condition specific to tennis (anaerobic endurance, speed, power)
- Technique (strengths) and Tactics (patterns)
- Mental skills adapted to competition
- Competition: secondary tournaments
- 4 to 6 weeks

PRE-COMPETITION PERIOD

- Low volume, high intensity
- Physical condition (agility, speed, power)
- Tactics (practice matches) most important
- Mental routines & positive environment
- Competition: preparatory tournaments
- Length depending on player's level

COMPETITION PERIOD

- Peaking at the right time
- Maintain fitness level (circuit training)
- Tactics (adapt to opponents and surfaces)
- Mental routines & concentration
- Competition: most important tournaments
- Length depending on player's level

TRANSITION PERIOD

- Recovering from the stress
- Assess past performance
- Participation in other sports
- Holidays, free time
- From 1 to 4 weeks

Questions?

EXAMPLES OF PERIODISATION FOR TOURNAMENT PLAYERS

- Under 14
- Under 16
- Under 18
- Professional
- Top Level

TIPS FOR EFFICIENT PLANNING (I)

- Decide on the most important tournaments and try to peak for them (goal setting)
- Make sure that the players get adequate rest
- Quality not quantity in the training
- Each individual training session should have a link with the overall year plan
- Take time to build up an endurance base once per year (6 weeks)

TIPS FOR EFFICIENT PLANNING (II)

- Major technical work should only be done during the preparatory periods
- Work/rest ratios similar to tennis specially leading up to competition
- Avoid major technical work in the lead up to competition

TIPS FOR EFFICIENT PLANNING (III)

- Emphasise the positive areas in the player's game leading to competition to build confidence
- Before competition make the practice simulate match-play situations
- The day before a competition reduce the volume of training
- During competition maintain physical fitness (ie. one 40 minute run for endurance)

COMPLETING THE ANNUAL PLANNER

- Identify important dates (school exams, family holidays, coach holidays, etc.)
- List the available tournaments from the different schedules (ITF, ATP, WTA, etc.)
- Put in tactical, technical, goals etc.

INTENSITY AND VOLUME

PHASE	TECHNICAL VOLUME	WORKLOAD INTENSITY
Preparation	High	Medium to low
Competition	Low	High

Mental intensity should be high throughout

An example of a yearly training cycle for double periodisation

Under 14 player

Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June	July	Aug
Rest	Preparation					Comp	Rest	Prepar		Competit	
1	2	3	4	5	6	7	8	9	10	11	12

Mayes (1995)

An example of a yearly training cycle for double periodisation

Under 14 player

with *macro* and mesocycles

Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June	July	Aug	
<i>Rest</i>	<i>Preparation</i>					<i>Comp</i>		<i>Rest</i>	<i>Prepar</i>		<i>Competit</i>	
Rest	General			Specific		Pre	Co.	Rest	Ge	Sp	Pre	Com
1	2	3	4	5	6	7	8	9	10	11	12	

Mayes (1995)

HOW TO INCREASE THE EFFORT (LOAD) IN TENNIS TRAINING

VOLUME	INTENSITY	COMPLEXITY
<ul style="list-style-type: none">• More repetitions and series• More drills• More time of training	<ul style="list-style-type: none">• More speed in the drill• More rhythm in the drill• Reduce recovery time between series and between drills	<ul style="list-style-type: none">• More shots & variations• More distances to cover• Zones of direction or position• Play against better opponents• Change the score system, etc.

LOAD VALUES IN TENNIS COMPETITION (Effort)

	LOW	MODERATE	HIGH
Duration	1 hour	1 hour 40 min.	2 hours 30 min
Number of games	20 (3 min. 30 secs)	27 (3 min. 45 secs)	36 (4 min. approx)

LOAD VALUES IN TENNIS TRAINING (Effort)

	LOW	MODERATE	HIGH
Duration	70 minutes	2 hours	2 hours 30 min to 3 hours
Time of drills	75%	46%	25% - 36%

MICROCYCLES

General aspects

- Highly intensive and demanding training contents:
 - speed,
 - anaerobic endurance,
 - dexterity, etc.) should be scheduled after easier sessions or days

MICROCYCLES

General aspects (II)

- The player's strengths should be scheduled:
 - at the beginning or at the end of the week during the preparatory phase
 - in the last days before the tournament during the competition phase due to psychological reasons (build self-confidence)

MICROCYCLE

Example

Sample weekly Plan			
Week 5 out of 14			
Day	Technical-tactical	Physical	Mental
Monday	Serve and return First serve percent	Sprints	Emphasise pace of play
Tuesday	Consistency at baseline Doubles return	Competitive sprints	Emphasise posture and coping behaviours
Wednesday	Match day		
Thursday	Stroke first aid	Fun ball skills	Discuss match results
Friday	Play points Tie-breaker matches	Light running and stretching	Relaxation, concentration and pressure drills
Saturday	Match day		

THE DAY PERIODS

- Schedule low intensity and low volume day periods after high demanding ones
- Schedule a tapering (reduced volume) day period before the tournament day
- Schedule a high volume or high intensity day period after the weekend, if the player has had enough rest

THE TRAINING SESSION (I)

- Determine the degree of load in each session in order to challenge the adaptation capacity of the player
- Know how to order the different training sessions for different results
- Schedule first the most important session of the day (i.e. the one that has the main goal)

THE TRAINING SESSION (II)

- In the general preparatory period:
 - Conditioning sessions before technical sessions
 - Conditioning: most important goal of the period
- In the specific preparatory period:
 - Technical sessions may be placed before tactical and physical ones
- In the pre-competition period:
 - Tactical sessions before technical ones

THE TRAINING SESSION (III)

- Sessions requiring speed, power and maximum strength should never follow days of high effort
- Sessions of speed-endurance, aerobic endurance or strength endurance should never precede sessions designed for technique, speed, flexibility or maximum strength

THE TRAINING SESSION

Determining factors

- The general and long term goals of the annual plan
- The specific and short term goals of the practice session
- The players characteristics
- The personal coaching philosophy of the coach
- The available means and facilities

THE TRAINING SESSION

Principles (I)

PRINCIPLE	CHARACTERISTICS
Goal setting	<p>The coach should have a goal for every training session and plan the session according to the achievement of that goal.</p> <p>The coach should take time to prepare for each practice.</p> <p>Drills should be well planned and structured.</p>
Warm up and cool down	<p>It is very important to warm up physically and technically before the session starts. This will help the player not only physically but also mentally. Besides, the players should go through a cool down routine just after the last drill of the session (i.e. a fun game, stretching, easy jog, etc.).</p>
Homogeneity	<p>The more similar the players are in ability, the easier it is to design good practices.</p> <p>The coach can use games and specific adapted scores to equalise the challenge to each member of the team during practice (optimal challenge) (differentiation).</p>
Practising every day the fundamentals	<p>It is very important to introduce in each daily training session the five fundamental game situations: serve, return, baseline game, approach/volley and passing.</p>

THE TRAINING SESSION

Principles (II)

PRINCIPLE	CHARACTERISTICS
Work all aspects	In planning a practice it is important to keep a balance between training weaknesses and strengths. The coach should keep a daily written record of training contents to ensure that each area of the game is being practised sufficiently by the player.
Use different types of drills	The coach should plan a varied practice by using different types of drills: basket drills, play with the pro drills, rally between players, and scrimmage or matchplay situation drills.
Adaptability	Drills should be adapted to players characteristics. The coach should modify the different aspects of a drill: feeding procedures, rhythm, work/rest ratio, difficulty level, etc., in order to match and challenge the ability of the player.
Fun, movement, etc.	Keep each drill short and quickly moving. Remain positive and be constructive with your criticism. Remember, a good drill done for too long, becomes a bad drill. Introduce games and competition drills with score. Drills should be enjoyable and challenging.

DRILLS

Introduction

- There are thousands of drills. Whether a drill is good or bad depends on :
 - The general & specific goal of the coach
 - The number of players per court / per coach
 - The time and means available
 - The players level of ability
 - The attitude/enthusiasm of the coach/player

DRILLS

General goals

- To emphasise the learning of a new skill (LEARNING)
- To improve skills which the player already has (CORRECTION)
- To maintain skills which the player already has (STABILISATION)

DRILLS

Specific goals (I)

- Technical: to learn a shot (basic, special, spin, situation), to improve a movement (footwork, swing, placement), to hit with more power, etc.
- Tactical: to learn the tactical use of a shot, to plan a strategy for a match, tactical patterns of play, match analysis, the game situations, etc.

DRILLS

Specific goals (II)

- Psychological: to handle pressure, to improve mental strength, concentration, motivation, emotional control, control of thoughts, visualisation, relaxation, etc.
- Physical: to improve general fitness, or specific physical qualities: speed, strength, power, co-ordination, endurance, etc.
- Mixed or combined: When some of the above specific goals are combined in a

DRILLS

Important aspects to consider

- The player knows and understands the main and secondary goals of the drill
- Player gives 100% effort, concentration and intensity
- Go for quality instead of quantity: e.g. 'hit the best 5 balls you can'
- When the quality of performance begins to drop: stop the drill

DRILLS STRUCTURE

- Easier drills should be performed before more difficult drills
- Technical drills (those which don't involve decision making) should be done before tactical ones
- Learning or correction drills should be done before drills aimed at stabilising the skills of the player

DRILLS STRUCTURE (II)

- Drills which involve practising co-ordination or fine motor skills (e.g. serve, drop-shot) should be performed before those which involve practising other skills (e.g. groundstroke endurance, etc.)
- Tough drills should be mixed up with fun or competition drills to ensure motivation

DRILLS STRUCTURE (III)

- After a hard drill it is better to rest more time. Follow a hard drill with an easier drill
- Schedule recovery drills towards the end of the session to maximise the quality of the training

DRILLS

Rotation systems

SYSTEM	CHARACTERISTICS
Number of repetitions	Each player gets a specific number of balls (2-8) and then rotate. It is better not to hit 1 ball and then rotate.
Time	Each player gets a specific amount of time (e.g. 5 sec.) and then rotate.
Scoring	The player who wins the point stays and the loser comes out (players play at maximum of 2 points).
Errors	Players rotate after they make an error or a given number of errors
King of court	Player who first scores 3 points first goes by himself

DRILLS

Procedures for performing

- Explain
- Demonstrate
- Practice
- Give feedback (positive whenever possible)
- Evaluate
- Adapt

DRILLS

Setting up the progression

- Targets:
 - Projection, Reception/Perception, Constraints
- Movement:
 - Before hitting, during and after the shot
- Number and type of shots:
- Use of scores: balls to a target, in a row, etc.
- Work/rest ratio

DRILLS

Intensity

- **High intensity drill:** No rest, continuous hitting. 2/1, 1/1 work/rest
- **Moderate intensity:** 1/2, 1/3 work/rest, realistic ratio
- **Low intensity:** 1/4, 1/5 work/rest, warm-up, learning or correction ratio

DRILLS

Periodization

- Preparation period (Learning or correcting):
 - 20 min. drill max.
 - Use different drills
- Pre-competition (stabilizing):
 - 10-20 secs. work
 - 20 secs. rest
 - Every 8-10 min. drill, 2 min. rest

GROUP TRAINING

Basic prerequisites (I)

- 4-6 players of homogeneous skill levels
- 1 to 2 - 2 ½ hours session
- 1 - 2 courts are often used
- Players should practice every day the 5 basic game situations
- Always full participation (hitting, moving, resting, picking up balls, etc.) of all players

GROUP TRAINING

Basic prerequisites (II)

- It is mandatory to have one or two main goals of the training session
- Coach creates a positive learning/training environment:
 - 3:1 credit to criticism,
 - go for it attitude,
 - performance versus outcome,
 - positive feedback, co-operative style, etc.

GROUP TRAINING

Practice routines

Available time	Tentative Schedule
1 hour	10 min. Warm up (physical and technical) 40 min. Main part of the session 5 min. Cool down 5 min. Review, summary and closing
1 hour 30 min.	5 min. Warm up (physical) 10 min. Warm up (technical) 60 min. Main part of the session (5 min. break in the middle) 10 min. Cool down 5 min. Review, summary and closing
2 hours	10 min. Warm up (physical) 20 min. Warm up (technical) 1 hour 15 min. Main part of the session (5/10 min. break in the middle) 10 min. Cool down 5 min. Review, summary and closing
2 hours 30 min.	15 min. Warm up (physical) 20 min. Warm up (technical) 1 hour 35 min. Main part of the session (15 min. break in the middle) 10 min. Cool down 10 min. Review, summary and closing

INDIVIDUAL TRAINING

Basic prerequisites (I)

- The methodology of training depends on the goals and on the coach's level of play:
 - **Good level of play:** It is possible to rally, play points and practice match situations. No need to have a sparring partner all the time
 - **Average level of play:** It is better to use feeding drills or rallying to specific zones of the court. It is important to have a sparring partner

INDIVIDUAL TRAINING

Basic prerequisites (II)

- The length of the session can be approximately as follows:
 - Beginner: 30 to 45 mins.
 - Intermediate: 45 mins to 1 hr. 15 mins.
 - Advanced: 1 hr. to 1 hr. 30 mins.
- 1 court is used for the training
- Ensure that the player practices every day the 5 basic game situations

INDIVIDUAL TRAINING

Basic prerequisites (III)

- As the player is playing all the time, it may be **difficult for him to maintain a high concentration** during all the session
- Physically the player requires **rest periods**. So that, the technique doesn't break down
- Combine drills with rest intervals where you may **give feedback** to the player, ask him to **drink**, to **rest** or to **pick up balls**.

INDIVIDUAL TRAINING

Practice routines

Available time	Tentative Schedule
30 mins	5 min. Warm up physical and technical 20 min. Main part of the session (2-5 min. break in the middle) 5 min. Cool down, review, summary and closing
45 mins	10 min. Warm up physical and technical 30 min. Main part of the session(5 min. break in the middle) 5 min. Cool down, review, summary and closing
1 hour	10 min. Warm up (physical and technical) 40 min. Main part of the session (5 min. break in the middle) 5 min. Cool down 5 min. Review, summary and closing
1 hour 30 min.	5 min. Warm up (physical) 10 min. Warm up (technical) 60 min. Main part of the session (5 min. break in the middle, 2 times) 10 min. Cool down 5 min. Review, summary and closing

MENTAL TRAINING

Planning

- **PREPARATION:** Motivation, 100% effort, fun & enjoyment
- **PRE-COMPETITION:** Emotional control, concentration, positive thinking
- **COMPETITION:** Visualization, behavioural control, specific match play situations
- **TRANSITION:** fun & enjoyment

MENTAL TRAINING

Planning (II)

- Depends on the mental ability, the period of the season and the player characteristics
- Average: from 15 to 20 minutes per session, 2 to 3 times per week
- The coach may plan specific mental training drills inside each technical or tactical session

PHYSICAL TRAINING PLANNING

PHASE	I PREPARATION	II PRE- COMPETITIVE	III COMPETITIVE	IV ACTIVE REST
Goal	Firm base fitness level	Tennis specific training	Physiological peak	Recovery
Fitness training	Aerobic 20-40 minutes continuous 3 days/week during 6 weeks	Anaerobic/aerobic Interval and circuit training 1 day/week	Tennis specific drills short explosive One 40 minutes run each 2 weeks	Light fitness training especially in other sports
Speed training	Speed resisted training 2 days/week Before endurance and strength sessions	Speed reaction drills 1-2 days/week	Tennis specific and ball drills short explosive	Practice of other sports
Strength training	Low intensity 2-3 sets High repetitions 12-15 2-3 days/week Leave 48 hours between sessions to recover	Higher intensity 4-5 sets Lower repetitions 4-8 2-3 days/week	Decrease intensity Circuit training 1-2 sets 12-15 reps. Once each 2 weeks	Practice of other sports