



editorial

Welcome to issue 26 of the ITF Coaching & Sport Science Review – the first issue of 2002.

Over the last few years, the ITF's Tennis Development Department has been producing educational materials for tennis coaches with the aim of making it easier for our ITF Member Nations to educate and certify the coaches in their country. As part of this on-going process, a new publication, 'Developing Young Players', is now available in English and Spanish, while the recently finished 'Tennis Volunteer' booklet is also available in Spanish and French. 'Developing Young Players' focuses on training and competition for 14 & Under players and gives specific guidelines on planning, training, drills, and coaching programmes for players of this age group.

Another feature of the Tennis Development Department's Coach Education Programme is that of Regional Workshops, which are held regionally every two years and which provide coaches with access to the latest coaching information. This year the Regional Workshops will deal with both high level player development and with the recreational/participation side of coaching. They will once again cater for coaches in all regions and coaches who are interested should approach their National Associations who will shortly be receiving detailed information related to the Workshops. The tentative dates for the different Regional Workshops are as follows:

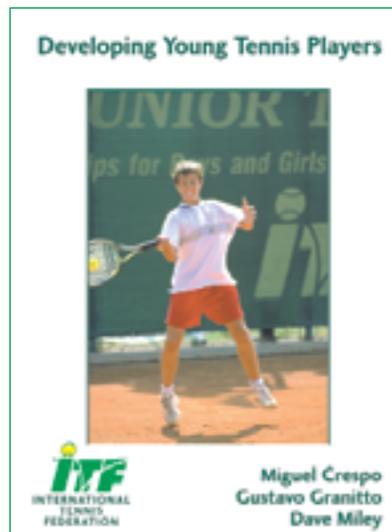
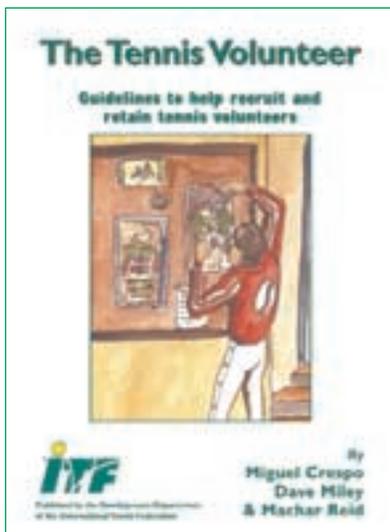
- The ITF Central American & Caribbean Workshop will be held in Fort Lauderdale, USA from 9 - 15 September.
- The Tennis Europe Coaches Symposium will be held in Val do Lobo, Portugal from 12-17 October.
- The ITF East & Southern African Workshop will be held in Gaborone, Botswana (26 - 29 November) and the ITF West & Central African Regional Workshop will be held in Abidjan, Ivory Coast (2 - 5 December).
- The ITF/ATF Regional Workshop - There will be two Regional Workshops in Asia. One in Dubai from 14 - 18 October and the other in Guangzhou, China from 20 - 25 October.
- The ITF South American Workshop will be held in Rosario, Argentina from 11 - 17 November.

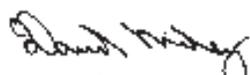
In our continued efforts to better service coaches throughout the world, the ITF is grateful for the co-operation of the people responsible for coach education in the most developed tennis nations who have shared, and in many cases allowed, the ITF to use their material. Many of these people have been members of the ITF Coaches Commission and we would like to take this opportunity to inform you of the newly appointed members for the 2001 – 2003 period. They are: Paul Chingoka (Zimbabwe-Chairman), Alberto Riba (Spain), Carlos Kirmayr (Brazil), Nick Saviano (USA), Lynne Rolley (USA), Amine Ghissassi (Morocco), Hans Peter Born (Germany), Bernard Pestre (France), Ivo van Aken (Belgium), Anne Pankhurst (Great Britain), Ann Quinn (Australia), and Jun Kamiwazumi (Japan).

In this issue, you will also see that we are enclosing information for National Associations interested in hosting the 13th ITF Worldwide Coaches Workshop. The event is the showpiece of the ITF's Coach Education Programme and is to be held during October/November 2003. Any National Association interested in hosting this unique educational event is asked to submit their proposed bid in writing to the ITF Development Department before 30 June 2002.

Finally, we would like to extend thanks to all the coaches and experts who have contributed articles for this issue and remind all of you that our Review is available in the "Coaches News" section of the ITF website, www.itftennis.com.

We hope you enjoy the 26th issue of ITF Coaching Sport & Science Review.




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The Games for Understanding (GFU) Teaching Approach in Tennis

By Adrian Turner Ph.D. (Associate Professor, Sport Pedagogy, Bowling Green State University, USA),
Miguel Crespo, Ph.D., Machar Reid and Dave Miley (ITF)

Introduction

Shelly Jones has just finished teaching a lesson on tennis to her class of 12-14 year olds. During the class she focused on teaching basic tennis skills (forehand, backhand, serve and volley). The majority of her instructional tasks were technique drills with some game play at the end of each session. During the matches at the end of her classes Shelly noticed that many of the students who performed quite well during the drills were not able to adapt their techniques to the demands of the subsequent tennis games.

The above scenario is quite common: young players unable to effectively execute many of the basic tennis skills during games because of a lack of understanding of the overall dynamics of game play. While skilled performance in sport relies on both motor skill execution and application of game knowledge (tactics and strategy) many teachers have traditionally used a technique model for tennis instruction.

The Technique Teaching Approach

The emphasis in this model is on students acquiring technical skills for game play.

The structure of the technique approach is as follows (Turner & Martinek, 1999):

1. Introductory activity: Explanation of the skill.
2. Demonstration of the skill.
3. Practice: Structured tennis drills designed to enhance skill acquisition. They are usually static drills, at first, before students attempt more dynamic practice tasks.
4. Feedback: During each class the teacher or coach provides feedback on technique to the students.
5. Game play occurs at the culmination of each lesson and the

teacher provides corrective-skill feedback at this time.

As an example, the following skills can be covered in a 10 lesson unit: footwork, forehand, backhand, lob, smash, forehand and backhand volley, drop shot and serve. Players could also participate in singles games (half court or full court) at the end of each lesson for the initial eight classes. For the final 2 lessons they could play doubles games at the end of their classes.

For over a century, physical education teachers and coaches have been using this model because it has intuitive appeal. The skills are broken down into small steps, and mastery of these skills is perceived as a way to achieve the larger learning goal of playing the game effectively. Unfortunately, in order to achieve the ultimate learning goal the student must be able to adapt the tennis skill he/she learned to a variety of game conditions and that also requires the performer to possess game knowledge and understanding. These two additional components are not emphasized in the technique approach to teaching tennis. However, research scholars have shown that game knowledge and understanding are easily attainable and change very rapidly during development (Thomas & Thomas, 1994).

The Knowledge Component

There are two kinds of knowledge, declarative and procedural, that are applicable to both learning and playing sport. A form of declarative knowledge would be the rules of tennis (factual information), where as electing to use a drop shot in the game context would be an example of

procedural knowledge (if this situation exists then do this action). Novice sport performers often lack both declarative and procedural knowledge and this is reflected by novice tennis players' inability to make appropriate decisions during game play.

Consider the following tennis example of a novice player receiving a short ball that lands in the service area. The novice player "concentrates on returning the short ball and moving back defensively to return the opponents next shot" (McPherson & Thomas, 1989, p. 192). A player with better game understanding in the same situation would "hit an approach shot down the line, follow the ball to the net, hit an offensive volley, and set up for a put away volley" (McPherson & Thomas, 1989, p. 192).

Research has suggested that declarative knowledge, or factual information, is a precursor to procedural knowledge (McPherson & Thomas, 1989). One approach to teaching sports that advocates introducing children to mini game situations early in the instructional process thereby facilitating the development of declarative and procedural knowledge and tactical decision-making, is "Games for Understanding" (Turner & Martinek, 1995).



The Games-Based Teaching Approach

The Games-Based Approach (GBA) focuses on the tactical problems of game play.

The structure of the approach can be summarised as follows (Turner, Allison & Pissanos, 2001):

1. Introduction: A mini game (modified tennis game) is introduced initially at the start of each lesson along with a description of the basic rules of this game.
 - The goal is to encourage tactical thinking (what to do in specific game situations).
 - The rules provide shape to the game and determine the range of tactics and skills that are required for successful performance.
 - The game is used as a point of reference to assist players in learning to make appropriate decisions in light of tactical awareness.
2. Selection of tactical responses: Students learn how to match game conditions with the selection of appropriate tactical responses.
 - The teacher and students will

investigate the tactical problem and potential solutions.

3. Skill practices: The students will recognise the need for learning specific skills via game-related practices to solve their tactical problems.
 - Skills, like volleying and smashing, are subsequently taught once students see the need for these in the context of their games.
 - Skilful performance is thus viewed in the context of the learner and the game.
4. Game play: Following game-related practices, students will return to game play to apply their skills.

An outline of the contents for 10 lessons using the GBA (modified from the unit design of Griffin, Mitchell, & Oslin, 1997) is provided below.

Research on the Games-Based Approach

In recent years researchers have examined the efficacy of a GBA to sports instruction. However, there has been little tennis specific research conducted with the GBA.

Tennis teachers and coaches need to be provided with research-based information pertaining to the effectiveness of the GBA and Technique Approach in order that they can provide the optimal tennis learning experiences for their students.

Conclusion

The GBA has found considerable support among physical education practitioners in Europe and the United States (Griffin, Mitchell & Oslin, 1997; Turner, 2001). Governing bodies, in various sports, are also beginning to recognise the potential of a GBA. The International Tennis Federation (ITF) has adopted a similar GBA to introduce young players to tennis via mini-tennis. The importance of understanding the precise benefits of a GBA are highlighted by the ITF School Tennis Initiative (STI) to introduce mini-tennis to as many elementary school students as possible each year across the world. Similarly to reinforce the effectiveness and appropriateness of the GBA as a vehicle for the introduction of tennis, the ITF is actively supporting GBA research efforts.

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Lesson	Tactical Problem	Lesson Focus/Objective
1	Setting up to attack by creating space on opponent's court	Court awareness/Creating space using groundstroke (forehand)
2	Setting up to attack by creating space on opponent's court	Court awareness/Creating space using groundstroke (backhand)
3	Setting up to attack the net – depth	Getting to the net/Approach shot
4	Winning the point	Using the approach shot and volley
5	Setting up to attack by creating space on opponent's court	Starting the point on attack/Use flat serve to put opponent on defence
6	Setting up to attack by creating space on opponent's court	Groundstroke variations/Cross court and down the line or lob
7	Winning the point/Defending against an attack	Using the volley or smash to win the point/Returning the smash
8	Winning the point/Defending against an attack	The attacking drop shot/ Returning the drop shot
9	Attacking as a pair	Side-to-side offence (doubles)
10	Attacking as a pair when serving	Setting up a winning volley (doubles)

American College Tennis

By Mark Ozer (President, Global Sports Connexion, USA)

As top coaches, you play a special role in your student's future on the tennis court and in all aspects of their lives. While a few of your gifted students may have the chance to become world-class professional players, a much larger number may be able to leverage their tennis ability to achieve success in different ways. In this article I outline some of the requirements and steps necessary for players interested in competitive and academic opportunities in the United States.

The United States offers tremendous opportunities for athletes to study and compete at the university¹ level. All sports including basketball and football seek athletes, but tennis with its strong worldwide level is perhaps the most international sport in American colleges. The cost for families is often very low and the level of tennis and academic opportunities are very high. It is also a wonderful structure for growing as a person in an international environment. Here are some key steps to help players understand and find the most suitable opportunities.

Academics:

Ideally students have completed secondary school studies and taken a set of standard courses that qualify them for universities in their home countries. If students did not complete their studies, there may be alternate routes to qualify for university admission but the path is a bit more complicated.

Two standardized tests, the SAT and TOEFL are generally required. These tests are given throughout the year in every country. The TOEFL is a test of English proficiency for international students, who are not native English speakers. The SAT is a test of Mathematics and English verbal ability. Universities will differ greatly in terms of the grades and scores they expect, but there are national minimums set by the NCAA, an organization that oversees university sports.

Tennis Level:

Here are some steps a player should take to make things easier for American coaches to understand their level. Players should:

- Create a 1-page tennis biography with recent rankings and outstanding tournament results.
- Create a 30-minute NTSC format video of them competing in a match setting; both players should be visible.
- Try to make comparisons with other players from the region who have gone to school in the United States as well as try to arrange a practice match with them so they can act as a reference with American college coaches.

Scholarship and budget

Women's tennis teams have 8 full scholarships. A full scholarship covers the cost of studies, meals, housing, textbooks, and all sports expenses. This leaves the family to pay only round trip travel to the United States and pocket money along with some small taxes and health insurance. A full scholarship can have a value of up to \$35,000US per year. Men's tennis teams have 4.5 scholarships, divided among 8 players meaning all but the #1 player will likely pay some part of the total cost depending on their position on the team. The #4 player on the team for example might have all of their studies covered but would have to pay for their meals and accommodations which might be \$5,000US per year. Men's tennis players and their families must evaluate their budget for 1 year and also for the entire 4 years of study. As a male player's position improves on the team the scholarship amount will likely increase lowering the cost for families.

Training Possibilities

Many college coaches are among the top group of all coaches in the United States and they often have experience playing or coaching at the international level. The head coach along with his assistant typically conducts a three-hour practice each afternoon for the 8-10 players on the team. Coaches will also be available in the mornings for shorter individual workouts with players. At top programs, there are often strength and conditioning coaches who also work with the team. There are over 250

teams in the NCAA first division and the level of players, coaches, competition and facilities varies widely.

Types of Schools

There are over 3000 schools in the United States. In addition to NCAA division 1, 2, 3 there are also NAIA schools and junior colleges. Student athletes not immediately accepted at Division 1 schools can attend smaller schools before switching after 1 or 2 years given sufficient academic progress. Students must also meet certain standards at their school to continue competing for the team and also to stay in school at all levels. An explanation of all types of schools in the United States is provided below.

Collegiate athletics is broken into five blocks - each of which has different rules and procedures:

- **NCAA (National Collegiate Athletic Association) Division 1**

This top league has the strongest competition and the strictest rules. There are over 250 Men's and Women's programs in Division 1.

- **NCAA Division 2**

Similar to Division 1. Schools are generally smaller and offer slightly more relaxed admissions and eligibility requirements. There are over 200 Division 2 tennis programs.

- **NCAA Division 3**

These schools cannot offer athletic scholarships, but are often ranked among the top academic institutions in the country. There are over 300 Division 3 tennis programs.

- **NAIA—National Association of Intercollegiate Athletics**

These schools vary greatly in size, level of competition, and academic levels. NAIA schools generally have more relaxed rules for acceptance and eligibility than NCAA schools. There are over 200 NAIA tennis programs.

- **Junior College**

These are two year schools which feed into larger NCAA institutions. They have few entrance requirements and can be a good first step into American athletics and academics. A high percentage of the top tennis players are International. Former Junior College tennis players include: Brad Gilbert, Paul Haarhuis, Stephane Simian, and Michael Pernfors. Junior colleges are inexpensive, but new rules limit the number of foreigners on tennis scholarships. There are over 500 Junior colleges in the United States.

Timetable and search Process for players

- Talk through a player's goals with them and try to see if the US is a good fit.
- Male players and their families should discuss budgets.
- Families should decide the relative importance of tennis and academics.
- All tests should be registered for and students should have confirmation that their curriculum

satisfies NCAA requirements.

- Compile tennis biography and produce a video.
- Start contacting schools by spring or summer of the year before they are hoping to begin studies.
- Arrange visits for students to see universities and/or have serious discussions with American coaches by fall before they begin school².
- Send applications to schools and have all academic grades

translated, if needed.

- Students should make school choices by April and begin school in September³.

¹ As distinct from professional schools such as law, medicine or business that do not include organized sports.

² NCAA rules state that tennis players have 1 year from the end of high school studies to enroll in a university.

³ Students normally begin school in September, but January is a secondary option.

Ten Ways to Prevent a Groin Injury

by Babette Plum, MD., PhD. (Medical advisor to the Royal Netherlands Lawn Tennis Association)

Groin injuries are fairly common among tennis players and can often last for months. The pains, which are usually located near the pubic bone, tend to be caused by an inflammation resulting from overexertion or overloading of the muscles and tendons in the groin area. When playing on grass or clay, the main cause is unstable footing, which often leads to slipping and over extension of groin muscles (ie. splits). On hard courts and many indoor surfaces, however, good traction can also lead to injury when one attempts to recover from the lateral movements (ie. in running for a wide ball). The pain is most strongly felt during lateral movements of the injured leg. Because of the slow recovery, early diagnosis and treatment is essential but even when diagnosed early, the athlete's performance may be inhibited for many weeks. In this article I will focus on 10 easy, but often neglected, ways of preventing a groin injury.

Stretching exercises (All these stretches should be performed before and after every physical workout):

- 1) Long Adductors.** Sit upright on the floor with your legs extended in a position. While keeping your back straight, gently bring your chest as far forward as possible and hold the stretch for 20 seconds. Repeat this exercise 5 times.
- 2) Short Adductors.** While seated on the floor, put the soles of your feet together and grab hold of your toes. Separate your knees and bring your heels towards your buttocks (not too closely). Slowly pull yourself forward until you feel the stretching in the groin area. Try to hold for about 20 seconds.

- 3) Abductors.** Sit in a cross-legged position and slowly lift your right ankle to the outside of your left thigh. Use both arms to pull your knee gently to your chest and hold the position for 10 seconds. Repeat the same exercise for your left abductor.



- 4) Iliopsoas.** From a standing position, take a big step with your right leg. Then, while keeping your back as straight as possible, lower your left knee until it is a couple of inches off the ground, pressing the left hip forward. Hold for 5-10 seconds and then repeat for the right iliopsoas (photo above).
- 5) Quadriceps.** Stand on your right leg and pull your left foot to the buttocks using either hand. Use a wall to keep your balance if necessary. Hold the stretch for about 15 seconds and repeat it for the right quadriceps.
- Strengthening exercises**
- 6) Adductors (1).** Stand straight up with your legs approximately shoulder width apart. Fasten one end of a long elastic band to your right leg and tie the other end to a heavy stationary object (such as the leg of a table) on your right. Gently pull your right leg to the left, thus closing your stance and

elongating the band. Repeat this exercise 15-20 times for both legs.

- 7) Adductors (2).** Lie down on your back and place a ball (basketball or volleyball) between your knees while keeping your legs fully extended. Squeeze the ball for 10 seconds and then relax. After 10 repetitions try the same exercise with the ball placed between your feet.
- 8) Abductors.** Use the same elastic band you used during exercise 6, but now attach one end to your left leg and the other end to the stationary object, which should still be located on your right. Stand with your feet about a foot apart and slowly slide your left leg to the left. Repeat the exercise 10 times and then switch legs.
- 9) Adductors and Adductors.** Sit on the floor with your legs extended and parallel. Ask a friend to sit the same way, while facing you and placing his (or her) feet on the outside of your ankles. Lean back and use your arms to support yourself. Slowly press your feet outward while your friend applies an opposing force. Try to keep the pressure for 10-15 seconds and then switch roles with your partner.
- 10) Stomach crunches.** Though often neglected, a strong lower abdomen is necessary to avoid an unstable pelvis, which can sometimes lead to groin strains. Repeat the following exercise as often as possible: Lie on your back, arms crossed and legs straight. Slowly raise your shoulders and feet about half a foot off the ground for approximately 5-10 seconds.

The Importance of Routines in Competition

By Guillermo Ojea (Master in Psychology of Physical Activity and Sport, Argentina) & Javier Vicente (Clinical Psychologist, Argentina)

Introduction

Observation of elite tennis players allows us to clearly see that most of them follow routines prior to certain strokes, for instance before the serve and the return. These movements, although they may seem similar, each have their own individual characteristics that are related to the style and practice of each player.

When we speak about routines we should clarify that their role is to help the player achieve a state of optimal concentration, attention and activation. The following of a sound routine will help players feel confident and better focused on their goal.

Often, the player's mind wanders during specific moments of the match or during rest time and in the process their thoughts are directed to the future or their attention to external situations. Effective routines will assist players recover the concentration state that is needed, for instance, to start a new point.

Although a routine is made of a series of movements performed until they are automated, for it to be most effective it should have certain flexibility and be related to the individual characteristics of each player and each game situation.

In a pressure situation in which there is more anxiety, the routine can be slower or be repeated once more. The player can bounce the ball one more time or add several movements to relax the shoulders, etc. This will not affect the efficacy of the routine.

It is crucial that the player performs the whole routine. In situations in which the player is trailing in the match, we often see players forget their own routine or perform only part of it. Usually, during these moments the player starts to get angry without being aware of what is happening. For this reason, it is essential that the psychological part of the routine is performed together with all of the movements. By doing so, the player will be encouraged to eliminate doubts and worries before hitting the ball. Conversely, if the player is still thinking about the point already lost, it is highly unlikely that he will be attending the match sufficiently to

perform at his best.

We should also take note that if the routine is performed in a forced or stereotypical fashion it has the risk of becoming something rigid, heavy and superstitious; at times even approaching an obsessive ritual. In these cases, the player feels that no movements can be modified without there being a damaging consequence. Thus, when we are teaching players to follow several routines, this reinforces the need to consider their personalities.

Psychologists as well as tennis coaches should emphasize the flexibility of the routines and need to be aware of the changes that may occur during competition, which many times are indicators of the emotional

state of the player.

Examples

In the table below we present several examples of routines that can be used as a guide. They are not recipes since it is only possible to perform a routine if it is adapted to the style and individuality of each player.

Conclusion

Routines are an indispensable tool to achieve a state of optimal concentration, attention and activation. Since they should eventually become automated, it is important that each player is capable of structuring their own routine, according to their individual preference and rhythm.

ON ARRIVAL	It is advisable to arrive at the club with enough time (avoid being rushed). Before starting the warm up it is recommended to have a look at the court (its appearance, if there's wind) as this will facilitate the player's perception and control of the situation. In order to avoid distraction, the player can perform a relaxing activity, for instance, listening to music.
SERVE	<ol style="list-style-type: none"> 1. I go to the spot from where I will serve. 2. I am in position and try to loosen my muscles. 3. I bounce the ball (as many times I think necessary) 4. I focus and visualise where I want to direct my serve. 5. I serve.
RETURN OF SERVE	<ol style="list-style-type: none"> 1. It is important to keep focused and to know when to activate or relax depending on the situation. 2. This state can be achieved using different channels; <ul style="list-style-type: none"> Visual: To observe the body language of the opponent. Kinesthetic: To set your feet in motion. <p>Self-talk can also be used. It can be:</p> <ul style="list-style-type: none"> Motivational: Pump oneself up. Instructional: With a tactical goal.
TIME BETWEEN GAMES	This period should be productive. To avoid possible distractions (i.e. watching who is playing on the next court, looking at the audience), it is advisable to perform the following routine: drink water, towel off, look at the strings, take a deep breath. It is also wise to mentally rehearse the tactics used in order to have a better picture of the situation and, if needed, to make any changes.
HAVING MISSED A SHOT	Rehearse the stroke. This will allow you to start the next point with a more positive attitude. Remember that it is crucial to play point after point, keeping your mind in the here and now.
OTHER SITUATIONS	When the opponent intentionally delays the game, it is a good idea to stop for a second, take a deep breath and perform the routine again.



Another aspect to take into account is that when a player needs to repeat certain actions or replicate specific situations (such as always playing with the same shirt, eating the same food and being in the same place before each match, not stepping on the lines of the court between points, thinking that something is wrong if the coach is not seated in the same place, etc) we are in the sphere of cabala or another type of “help” that has nothing to do with the aforementioned routines, but that can be explained some other time.

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Recovery for the Tennis Player – II

By Machar Reid (ITF), Miguel Crespo (ITF) & Angela Calder (Australian Institute of Sport)

Introduction

In the previous issue of ITF Coaching & Sport Science Review we included an introductory piece on recovery and its importance in optimising tennis performance. In effect, the principle of recovery relates to the encouragement of adaptive processes after the presentation of a training stimulus. Adaptation to this stimulus is evidenced by improved performances - the goal of every tennis player's training program.

The intention of this article is to therefore explore in greater depth how three different recovery modalities (passive rest, active rest and physical therapies) can best be used to enhance the physiological and neurological recoverability/adaptability of a tennis player. The authors recognise the undoubted importance of appropriate nutrition and hydration in this regard yet are comforted by the wealth of readily accessible information on this matter, while in a future issue of ITF Coaching & Sport Science Review recovery techniques specific to the psychology of a player will be covered.

PASSIVE REST

As simple as it sounds, sleep is the most important form of passive rest. Typically seven to nine hours of sleep per night provides invaluable adaptation time for players to adjust to any physical and emotional stressors they experience during the day. Occasionally players will have difficulty getting to sleep due to the excitement of

the day's events or the anticipation of those to come therefore it is important for players to develop habits to promote a good nights sleep (Figure 1).

Figure 1. How to develop good sleeping habits

Things to do:

1. Reduce thinking and worrying in bed – learn to *switch off!*
2. Practise relaxation techniques before going to bed. (relaxing music, muscle relaxation, breathing exercises, visualisation)
3. Lie down to sleep ONLY when you are sleepy.
4. If you don't fall asleep within 30 minutes after turning out the light get up and do some relaxation work (see Point 1).
5. If you wake up in the night and can't go back to sleep follow Point 3.
6. Get up at the same time each day.

Things to avoid (evening)

- i. Caffeine (eg. coffee, tea, coke, chocolate)
- ii. Nicotine
- iii. Alcohol
- iv. High protein meals

(Adapted from *Recovery in Training and Competition* (Calder, 1994))

Other forms of passive rest that are readily available to all players are reading and listening to relaxing music. Meditation and flotation (flotation tanks provide an environment with minimal

stimulation by reproducing weightlessness, no sight, no sound unless the player relaxes to music or to an affirmation tape) are two other techniques that help a player's mind switch off from all surrounding stimuli but are somewhat restrictive as they can be quite expensive or may initially require special training.

When to use for recovery purposes:

Sleep – at the end of each day. After a late night however, players can sleep for one hour during the day, preferably after lunch (players should always try to wake up within one hour of their normal wake up time, irrespective of how late the night).

Music, reading – between and/or after training sessions, before bed.

Meditation – personal preference.

Flotation – after training sessions, on rest days.

ACTIVE REST

Active rest is much underestimated by tennis players and athletes in general. While active rest can be incorporated throughout training sessions, typically it is at the end of a training session, in particular a heavy session, or following a competition or heavy training week, that represent the ideal times to introduce active recovery activities.

Activities are selected to fulfil two main tasks: either to help recover the physiological state of the player (eg. light walking or cycle to recover the lactate system), or they can focus on

musculo-skeletal recovery (eg. stretching and exercises to promote postural efficiency).

Often, cross training can be used as a form of active rest provided the work intensities are modest (light aerobic) and the exercises undertaken are different to those normally performed in training. Pool work incorporating different movement patterns or swimming, particularly backstroke, are effective modes of active recovery for players and should be encouraged given that most clubs at which players train or hotels at which they stay during competition are equipped with a pool facility.

Rest days are essential. At least one day per week should be a non-training day. This allows players time for physical recovery as well as time to develop interests outside their sport, to help them lead a more balanced lifestyle.

PHYSICAL THERAPIES Hydrotherapies

A wide range of physical therapies are available to tennis players. While hydrotherapies and sports massage are the two most frequently used in sport, hydrotherapies are considerably underused and undervalued among the tennis fraternity. Showers, spa, baths, float tanks and saunas (dry baths), provide ideal environments in which to stretch and perform self massage. Contrasting hot and cold showers (which have recently been found to be as effective as an active recovery in recovering lactates), or using a warm spa with a cold plunge pool provides an increase in peripheral circulation, and neural stimulation. Similarly pressure from jets and shower nozzles enhance muscle relaxation by stimulating light contractions in muscles. Collectively this promotes both physiological and neurological recovery.

However as sweating tends to go unnoticed in wet environments, coaches should remind players of the need to be rehydrate before, during, and after

treatments. It is also important that treatment times are monitored carefully (Figure 2) as there is a tendency for players to linger in the warm environment and offset the benefits of the treatment through dehydration and neural fatigue. Players should feel relaxed but stimulated afterwards, not sleepy and lethargic.

Figure 2: Guidelines for Hydrotherapies Guidelines for Baths/Showers/Spa * How to Use

Rehydrate before, during, and after session
Clean skin with soap and shower off beforehand

Alternate: Hot (35-38C) Cold (10-16C)

Shower	1-2 minutes	10-30 seconds
		repeat X 3

OR

Spa/Bath	3-4 minutes	30-60 seconds
		repeat X 3

Shower and rehydrate to finish.

When to Use

Showers can be used anytime. Before, during after a session.

Spas and baths are best left till the end of the day (unless the athlete uses it properly when it can be used earlier)

*Note: do not use if the player has a virus or cold or recent soft tissue injury.

(Adapted from Recovery in Training and Competition (Calder, 1994))

Sports Massage

The second most frequently used recovery modality is sports massage (Figure 3). It has two major physiological benefits. First, it increases blood flow to enhance the delivery of oxygen and nutrients to tired muscles while also promoting the removal of metabolic by-products such as lactic acid.

Secondly, the warming and stretching

of soft tissues provides temporary flexibility gains. There are also psychological benefits as when tired and tight muscles relax there is a corresponding improvement in mood states. Players feel less fatigued and more relaxed.

Perhaps the greatest benefit from a sports massage however is the biofeedback players' gain as they become more aware of their bodies. *Tuning-in* to the way the body and its muscles and tendons have been stressed better helps the player identify and manage the stressed and fatigued areas.

While most tournaments have physiotherapists and/or masseuses on-site, they are more often that not, in very high demand. Players should be encouraged to learn self massage techniques that are easy to administer, particularly for the lower legs, chest, neck, shoulders and forearms.

Figure 3: Sports Massage Treatments Sports Massage

Sports massage treatments can be administered during three phases of training:

(a) Within training sessions:

massage is given during training sessions to help accommodate for high training loads and to increase the player's training potential.

(b) Preparatory Massage:

as part of a warm-up* phase can be given 15-20 minutes before competition. Techniques can be varied so that the massage can either relax an over-stimulated player or arouse an apathetic one. Sometimes the massage is localised to an injured area in an effort to prepare it before activity.

(c) Restorative Massage:

is given in the post loading part of a training session or competition. The techniques used aim to reduce muscle tension and fatigue and lower stress levels. The length and number of massage treatments varies depending on the type and intensity of the activity, and the state of the individual players. Elite performers should have at least two full body massages per week.

(* Note: Massage is an adjunct only to a sport specific warm-up and should never replace an active warm-up, which prepares the body both physiologically and neurologically for specific sports activities.)

(Adapted from Recovery in Training and Competition (Calder, 1994))

Acupuncture and Acupressure

Acupressure is often performed in addition to sports massage.



Conversely, acupuncture requires the practitioner to have more extensive qualifications and consequently is less accessible and more expensive. Both techniques, however, focus on balancing energy fields via specific points located on fourteen meridians, which pass through the body and have been claimed to influence a wide variety of conditions including oxygen uptake, respiration, and the immune system.

Although a recent study from China has demonstrated that muscles relax more after acupuncture than muscles, which receive no acupuncture treatments (which would in turn have a positive effect on the aforementioned conditions) there have been few other scientific endeavours to substantiate the effectiveness of acupuncture.

Hyperbaric Oxygenation (HBO)

Hyperbaric Oxygenation Therapy (HBO) is a means for increasing the availability of oxygen to the body. This is achieved by inhaling gas with a high oxygen content in an environment with increased atmospheric pressure. This enables oxygen molecules to reach damaged and fatigued body parts more easily than under normal atmospheric pressures, which have a much lower oxygen content.

Although HBO has been used as an aid to accelerate training adaptations in the former Soviet Union and more recently applied to sporting situations in Australia with the intent of accelerating the repair process for injuries, it is still in its infancy and its effectiveness in facilitating training adaptation and injury repair is under scientific review. HBO is unlikely to be

readily available to tennis players for some time.

Summary

Recovery is an essential ingredient of a balanced training program and fundamental for long term success in tennis. On it's own, hard work does not correspond to the best results. Tennis players need time to adapt to the work undertaken. With the provision of appropriate rest (and nutrition) and physical therapy, players will be better positioned to recover, and optimise, their physiological and neurological condition. Coaches should subsequently direct and encourage players to trial different recovery strategies in an effort to determine what is of best service to the personality and body of each individual.

Myths of Tennis Coaching

By E. Paul Roetert, PhD. (Director of Administration, USA Tennis High Performance Program), Miguel Crespo, PhD. & Machar Reid (ITF)

Introduction

In previous issues of ITF Coaching & Sport Science Review (12 and 13) we have included contributions on what makes someone a good tennis coach. This may seem self-explanatory as we can all identify good and bad coaches, yet is it really *that obvious?*

In tennis coaching, as in many other things in life, there are myths. These myths are statements or beliefs usually of nameless origin, which tend to be naively received and accepted by everybody. Furthermore, these myths are used to support existing practices that, in many cases, fail to evolve.

In this article we will summarise ten myths of tennis coaching. Through the myths, we can begin to understand the criteria that define good tennis coaches no matter the level at which they work.

Myth 1: The good coach is born. Average coaches are made.

Truth 1: Good and average coaches are mostly made.

Research has shown that the most important characteristics of the good tennis coach: leadership skills, empathy, communication abilities, people skills, etc. are primarily learnt.

Some people however, seem to have been born with an innate ability to speak, lead or teach. Nonetheless, these coaches will also have to improve and learn new coaching methods and/or techniques.

Myth 2: The coach should be a winner because winning is everything in tennis and in life.

Truth 2: The coach should be a winner but winning, especially at the junior level, is not everything.

Helping players win matches through improved performances, coaching them tactically, technically, physically and mentally, and teaching them to respect the rules of the game are crucial aspects of the coach's role. However, what's most relevant is the overall development of the player as a human being and as an athlete.

Coaches should not forget that the person comes first, the player second and winning, may be third. Tennis is an excellent vehicle for training youngsters to be successful in life – coaches should endeavour to use it as such.

Myth 3: If you played tennis at good level, you're obviously qualified to

coach tennis.

Truth 3: You are qualified to coach tennis only after being qualified to do so!

It is a common belief that if you've played tennis at good level, you're qualified to coach it. Obviously, this is not true. If you personally enjoy reading novels, this does not mean that you are qualified to be a novelist! Playing the game just implies that you know how to do it, not that you are good at teaching how to do it.

You are qualified to coach tennis only when you have learned, and know how to apply the principles of coaching. The best way to do it is by participating in the coaching courses of a relevant tennis organisation.

Myth 4: The better you played tennis, the more qualified you are to coach.

Truth 4: Playing ability and coaching skills are not necessarily synonymous.

It is obvious that tennis coaches need the necessary playing skills to demonstrate and rally with their players. However, we all know good tennis players that are not good

coaches. In some cases because they do not have the patience, the interest or the skills needed to be a good coach, or in others, simply because they have no real desire to be a coach! They are coaches just because they are or were good players.

A good coach will seek to become better “educated”. It does not happen overnight. There are no shortcuts in coaches education. Good coaches need to invest interest, time and money in themselves in order to reach their own coaching potential.

Myth 5: Effective and serious coaching is complex.

Truth 5: The obvious is the biggest secret. Keep it simple.

While seeking new information and learning opportunities are very important for any coach's development, complex coaching does not necessarily equate to effective coaching. It is not how sophisticated your coaching information is, but how well you use it and pass it on to your players.

Good coaches are those who use first hand information on sports science and technology, understand it and “translate” it in such a way that it is easily understood and applied by their players.



Myth 6: The more years of experience you have as a coach, the better you are at coaching.

Truth 6: Experience is not enough for good coaching.

Becoming a good tennis coach is not just about teaching lots of hours, seven days a week or one year after another. It is more than just having very good or a large number of players. Good coaching is an ongoing process where quality and not quantity is the key ingredient. Coaching experience (i.e. amount of coaching hours) can be meaningless if coaching quality (effectiveness, high standards, cooperation) is poor.

Coaches should learn to improve in such a way that their experience will help them to be more knowledgeable and impart better coaching.

Myth 7: Coaching is just a profession.

Truth 7: Coaching is more than a profession.

Coaching is not a 9 to 5 job. Sometimes, it has no hours, no free weekends, no long holidays. Like the role played by doctors and teachers in our community, the role of the tennis coach also transcends just a profession. It is a lifestyle choice where you choose to have opportunities, daily and sometimes hourly, to impact upon a person's life.

Myth 8: Trained coaches are needed most of all with top players, rather than with beginners.

Truth 8: Coaches should be knowledgeable at all levels.

People tend to believe that coaches who work with the champions are more indispensable, important and knowledgeable than those working with beginner or intermediate players.

Many champions have recognised that the coaches they've had when they first started to play tennis were the most important ones of their careers. Good coaches at the beginner level are of paramount importance since they are the ones responsible for creating an enjoyable and expansive environment for players just starting out. They are the ones who can lay the foundation for future success in tennis and in life.

Myth 9: A male coach is superior to a female coach.

Truth 9: Coaching effectiveness is not gender based.

Good coaching has nothing to do with the gender of the person. There are good and bad male and female tennis coaches. However, male and female

coaches do not coach the same. They may have different coaching characteristics, which are often defined by their gender. These characteristics, however, do not affect the quality of their coaching.

Myth 10: The best coach adopts a “command style”.

Truth 10: The best coach is the one who mixes up coaching styles according to the situation and the players.

A “command style” coach can be a good coach. However, the best coach is the one who grows his own coaching styles/principles and along the way understands that players are different and will learn and process information in different ways. Often these coaches are referred to as cooperative style coaches.

Good coaches learn to analyse the situations and learn from their players' needs such that they are able to use the different coaching styles accordingly.

Conclusion

Being a good tennis coach is a thrilling challenge. If you want to meet it, it is important to combine an understanding of sport science as it relates to tennis performance with an adequate playing level and effective communication and interpersonal skills. However, above all, your desire and interest to help others no matter their level of competence will be the determining factor, which will elevate you as a coach to the next level.

The primary job of a tennis coach is not solely to teach tennis, but to help their students to learn it by adapting all of the information available into practical principles that the players can apply.

Good coaches are well-educated coaches, true professionals of tennis coaching. An understanding of the reasons behind these coaching myths and the encouragement of coaches to realise what it takes to be a good tennis coach will benefit not only the profession, but the players and the game in general, as well.

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Mini-Tennis



Using Mini-Tennis efficiently

By Miguel Miranda (ITF Development Officer for South America)

Introduction

Mini-tennis has been shown around the world to be the most cost efficient and effective means of introducing young people to tennis.

It has proven extremely successful in countries like Sweden and France. However there are still quite a number of the more mature tennis markets, which do not promote or use extensively mini-tennis as a means of introducing young people to tennis.

Nonetheless, it is well known that mini-tennis is a scaled down version of tennis, in which smaller bats, a smaller court, softer tennis balls and a games based approach are features that are used to introduce young children to the game.

Unfortunately however, our experience has shown that many coaches using mini-tennis programmes have focused on the first part of the previous sentence (that related to equipment, which coincidentally would appear to be relatively easy to organise) but have paid little to no attention to the second part (that related to the games based approach, which, in contrast is considered difficult to implement).

These coaches are, in effect, using the appropriate equipment devoid of the most beneficial teaching approach. From the outside, the tennis lesson looks great: coloured bats and balls, cones, scaled down nets/courts and prizes for the kids, yet within, the contents of the lesson are still presented using a command approach, that typically involves forming long lines, hitting few balls and repeating or shadowing strokes.

If mini-tennis is to be used effectively then not only does the correct equipment need to be used, but the

correct teaching approach and methodology - a fundamental change in the philosophy of teaching tennis is necessary.

Mini tennis and the coaching approach

For many years coaching at the introductory level has placed considerable emphasis on tennis technique (i.e. ensuring that all starters develop “correct” technique so that they can then begin to play the game) and as a result tennis has often been considered by people starting out as a difficult sport to learn. It was not uncommon for players starting tennis to take from six months to a year of lessons before they actually got to play a game of tennis! Often the student learned despite the coach rather than because of the coach.

Recently however, the ITF has been very active in it’s promotion of a “games based” approach in an effort to introduce more people to tennis (i.e. where players learn by playing the game itself).

In short, this teaching philosophy promotes the concept that form (technique) should follow function (tactics). Players should start by attempting tasks (e.g. rallying the ball using foam or softer transition balls) and progress by gradually learning the techniques to rally and to play the game more effectively. This more user-friendly method of coaching mini-tennis and beginners should make the game more attractive for prospective players and therefore assist in getting people involved in tennis. It is also more “learner centred” - or in common language more challenging and enjoyable for the kids.

Apart from this important principle, the games based approach also relates to the organisation of



tasks. Old teaching methods are based on using line formation whereas mini-tennis should use buddy teaching and task assignment strategies through which more activity and independence is fostered.

Traditional teaching and coaching has used the so-called “command style” together with analytic or “part” methods and technical corrections from the coach. The new approach to tennis teaching methodology is however centred around the use of optimal challenge, discovery and problem solving styles, global methods and correction based on positive reinforcement or “positive sandwich”, and effective questioning or facilitation procedures.

This new philosophy is the one that should be adopted during mini-tennis teaching to help magnify the benefits that participants in mini-tennis can obtain.

Implementing mini-tennis

Countries such as Italy, Great Britain and Germany also have very successful mini-tennis programmes. In order to implement mini-tennis worldwide, in 1996 the ITF launched its Schools Tennis Initiative Programme, which encourages its member nations to introduce mini-tennis to school children aged 6 – 12 by including it into the school curriculum.

By providing subsidies for coaches to co-ordinate the programme, free mini-tennis equipment and educational materials, and assistance with courses to train schoolteachers, the ITF provides an incentive for the Federation to start the project. Before any assistance is approved however, nations must obtain an agreement from their Ministry of Education to incorporate mini-tennis into the school curriculum.

There are currently 80 countries from 5 continents taking part in the ITF School Tennis Initiative (STI) and an estimated 700,000 children were introduced to tennis through the programme in 2000.

The ITF intends to expand this programme by aggressively promoting mini-tennis in some of the more developed countries so that they too incorporate mini-tennis into their Development Programmes.

In addition, there are many mini-tennis booklets and manuals, which include thousands of games, drills and lesson plans or programmes that can be used in mini-tennis classes. The ITF has produced a Mini-tennis Teachers manual in English, French and Spanish and it is used to supplement and promote the STI programme among coaches and teachers worldwide.

Promoting mini-tennis

The ITF as well as National, Regional, Provincial Associations or clubs organise, oversee and sanction many tournaments worldwide. These tournaments range from Davis Cup and Fed Cup, to Men’s and Women’s professional tournaments, Junior ITF world ranking events, development tournaments, Veteran’s events, and amateur and local tournaments.

While the very nature of these tournaments helps to promote the game of tennis, further efforts can be made to use them as a vehicle to promote more specific development / participation initiatives such as mini-tennis. For example, a case in point would be the organisation of a mini-tennis exhibition to promote the game on at least one day of a Davis Cup and Fed Cup match or a Men’s and Women’s professional event. This very initiative, is in fact, already being employed by some Nations, whom have recently organised a Mini Tennis demonstration during home Davis Cup ties.

Each tennis organisation has to be encouraged to use all of these events and the players participating in them to promote this excellent means of introducing tennis to young people.

Conclusion

Tennis is a great game and mini-tennis is the best way to introduce it. It is up to all of the tennis family to use mini-tennis more efficiently to make the game even more interesting, more accessible, easier to learn and more attractive to all young persons currently not playing tennis.



Physical Training for Tennis - the Need for Better Integration

By Yuwal Higger (Obalo College, Israel)

Introduction

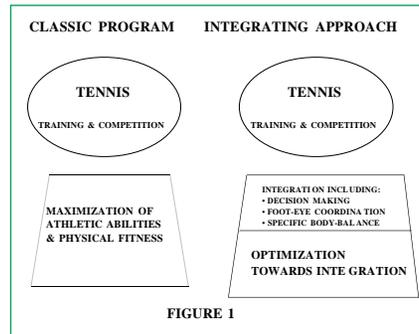
It has been widely accepted that the 'game-based approach' is generally, the preferred method for teaching and coaching tennis. This method has been proven to be very effective at all levels, and consequently, experts and leaders of ITF coaching programs recommend it over other traditional methods (Crespo, 1999). The 'game-based approach' has been adopted in many countries. In the United States, the USA Tennis Coaching Education Program officially supports using it as a main coaching tool (Saviano, 1999). In this respect, it would also be pertinent to acknowledge coach, Louis Cayer of Canada as a great contributor to the implementation of the 'game based approach' to the world of tennis.

The basic philosophy behind the 'game based approach' in coaching ball games suggests that to perform on court, players need to qualitatively perceive and analyse game situations, to make qualitative decisions very fast, and to execute the actions. Playing tennis is no more considered as a physical task per se. The ability to play is thought to be based upon integration of motor, physical and psychological (cognitive and mental) skills.

The game-based approach encourages coaching programs for tennis to emphasise the harmonic and integrated development of the technical, tactical, cognitive, mental and physical aspects of the game. However, as of today, coaches do emphasise integration of cognitions early in their tennis training, but physical training is still typically performed in isolation.

Integrating training

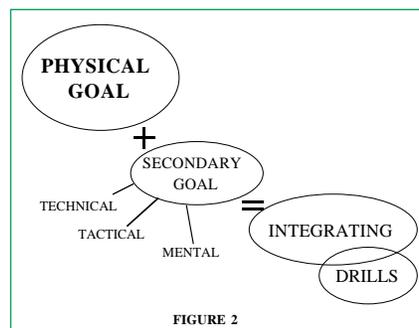
The purpose of this article will be to suggest that tennis specific physical training programs should also be updated. I would like to recommend that physical training programs for tennis be extended, with a third component added to the classic programs that usually contain two phases (i.e general and specific). The third component will comprise of drills



that integrate physical development with training of other important aspects, and therefore will be called an integrating component (figure 1). In the drills, game-like maneuvers will be executed in a way that footwork as well as other skills will be trained. Integrating drills will help players to improve their physical qualities, and in addition they will "educate" them to better utilize their physical abilities in game situations.

Based on 15 years of experience at different levels (children up to top 50 professional players), I believe that the integrated approach (game-based approach method to physical training) can be very effective and efficient. Furthermore, it makes physical training much more interesting. Players learn a great deal about the relationships between physical and playing abilities, and as a result they develop higher motivation and aptitude towards physical training.

To design integrating drills, coaches should first, set a **major physical goal** to be trained and emphasized. The physical goal could be, for example, development of on-court quickness, development of powerful and specific changes of direction, development of



on-court stamina or training energy systems (aerobic and/or anaerobic). Second, coaches should set a secondary goal to be trained within the physical training session. This could be a technical, tactical or mental (figure 2).

To accomplish the major physical goal, coaches should plan the physical load of the drill, based upon training principles and basic knowledge in exercise physiology. Duration (time) of work, intensity levels, rest periods between working bouts, number of repetitions in every set, and number of sets have to be determined systematically. For example, to develop anaerobic power drills of 5-10 sec. should be performed at maximum intensity (very important!). Drills will be performed 3-5 times (repetitions) in each set, with rest of 30-45 seconds between each repetition (work:rest ratio 1:6). For this purpose it will be best to work with 3-4 players on each court.

To master a secondary goal coaches should instruct players to execute a specific movement pattern that emphasizes a designated task: this could be technical, tactical or mental. With respect to the above example, during physical training, drills may be designed to improve footwork and the power of a player's propulsion in the approach (transition). Most coaches agree that an early and powerful transition towards the net may enable further advancement, better positioning, and more effective volleying. I believe that these physical-technical abilities may be very effectively and efficiently trained while developing anaerobic fitness. So why be less productive???

To master both goals simultaneously, coaches should design drills in which specific movements will be executed repetitively, in an open situation (incorporating decision-making), while **principles of training dictate loads**. Footwork will be emphasized, and other non-physical aspects may also be trained. With respect to the above example, an integrating drill to develop anaerobic

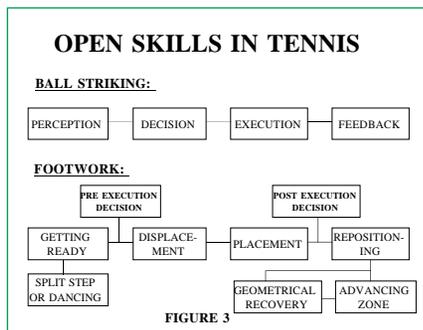
power (major goal) as well as approach footwork and mentality (secondary goal) could be created. In this drill players would be asked to perform two side to side baseline runs at full speed followed by an approach-like footwork and an advance towards the net. Time of execution would be 6-7 seconds. In the first set (4-7 repetitions), physical and footwork components would be stressed. Players would be instructed to run with a tennis racquet in hand but no balls would be introduced. In the second set, an attempt would be made to integrate powerful footwork with real life volleying. The situation would be gradually opened. To start, players would run on the baseline at 100% intensity, approach, emphasizing powerful footwork (no ball), and play

a volley or two, fed by the coach from the other half of the court. As the players progress, the approach and the volley would be played at maximum intensity and could continue for as long as the physical demands are met!

I strongly believe that integration is an important link between the weight room and the actual game. Throughout integrating drills, coaches and players may develop better awareness towards the importance of efficient footwork and the relationships between footwork and cognitive processes in open game situations (figure 3). Quite often improved integration may lead to extensive improvement in playing ability, despite only limited enhancement of athletic abilities such as leg-power or speed.

- When integrating training in physical training sessions, coaches should emphasize physical aspects. Intensities and duration of work and rest should be respected. **Teaching remarks concerning technical or tactical aspects should be kept to minimum.**

- Cognitive abilities (i.e. anticipation) may be improved significantly through *deliberate* practice. Integrating drills may help to develop such aspects in addition to the development of physical qualities.
- Integrating training is suggested in conjunction with, not in place of, general and specific physical training.
- Integrating training could be very effective for professional players who are concerned with their immediate playing ability (and ranking), and less willing to commit themselves to a long term program to improve athletic abilities.
- Integrating training is great for children who are not yet ready for systematic physical overloading.



Conclusion

To conclude I would like to suggest some coaching tips as well as to re-emphasize some key points:

- A clear distinction should be made between technical-physical training, which emphasizes the development of technical aspects under physical stress, and integrated physical-technical training, which is described in this article.

Letter to the Editor

By Howard Brody (Professor, Physics Department, University of Pennsylvania)

I would like to comment on the article on the SERVE in issue 25 of ITF Coaching & Sport Science Review.

In the last column of the article, there is the statement "Beginner players must not have a high ball toss." This is followed by the statement "This is because they have to strike the ball upward." While I agree that this latter statement is correct (they have to strike the ball upward), it has nothing to do with the first statement (I don't think the word "because" is justified).

The authors do not mention the principal benefit of a higher ball toss. If the ball is hit perfectly flat while it is descending from a high ball toss, it will automatically acquire topspin, with no additional effort by

the server. This fact is noted in the technical tennis literature (H. Brody, "Improving Your Serve", The Engineering of Sport, edited by S.J.Haake, pg 314, Blackwell Science, Oxford, 1998 and also in H. Brody, "Improving Your Serve", TennisPro, March/April 2001, pg 21.) It is pointed out that the higher the toss, the larger the safety window, and a toss of as little as 6 inches above the impact point can open the window by 15% for some servers.

If the ball is hit at the peak of its trajectory, there will be no topspin added and no additional opening of the safety window. The authors note in the last paragraph that topspin opens the window, but don't mention that a higher toss can provide some of that topspin. A

second point concerns a player's ability to hit a falling ball (a matter of timing). Repeated experiments have shown that a player can hit the same spot on the strings within a centimetre using a ball toss of one or two feet above the impact point.

Anyone who plays baseball knows this fact, as it makes it possible to hit "fungos" consistently. In a fungo, you throw the baseball up with one hand, have that hand join the other one on the bat and swing. Most players can consistently hit line drives, which means a repeatability of better than a centimetre. This removes the argument that it is necessary to hit the ball when it is relatively still.

Recommended Books and Videos

Books

USA Tennis Parents Guide. By USA Tennis. Year: 2001. Pages: 70. Language: English. Level: All levels. This book outlines how it is possible to be a parent who coaches and a parent who supports, while also ensuring that the child's tennis playing is a positive experience for all. Contents include: Introduction. Keeping your child's tennis in perspective. Helping parents make good decisions. Child development: its impact on the young tennis player. The role of tennis coaches. Competing in tournaments. Preparing for collegiate tennis. The sport for a lifetime: health benefits of tennis. Injury prevention. About USA Tennis Player Development. Contributors include: Chris Evert, Bill Aronson, Paul Lubbers, Jim Loehr, Stan Smith, Ron Woods, Nick Saviano, Doug MacCurdy, Lynne Rolley, Dede Allen, Jack Groppe, Paul Roetert and Todd Ellenbecker. For more information contact: USTA bookstore. Tel: 1 (888) 832 82 91.

Tennis elbow. (Le Tennis elbow). By Dr. Farhat Fadhloun. Year: 1998. Pages: 126. Language: French. This book covers the clinical aspects, the etiology, the treatment and the prevention of tennis elbow. Contents comprise of: Definition of tennis elbow. Biomechanics. Pathogeny. Examination of an elbow with pain. Developmental aspects. Differential diagnosis. Treatment. Personal questionnaire. Prevention. Conclusion. Bibliography. For more information contact: FTT@email.ati.tn.

Spain in the Davis Cup. (España en la Copa Davis). By Ramón Sánchez and Emilio Martínez. Year: 2000. 2 volumes. Pages: 560. Language: Spanish. Level: All levels. This book depicts the performance of the Spanish team in the Davis Cup from 1921 through until 2000, the year in which Spain won the event for the

first time. Contents include: Origins of Tennis. Short history of the Spanish Tennis Federation. History of the Davis Cup. Ties by years. Players. Media. Records and miscellaneous. Roll of honour. Spanish players and their opponents. For more information contact: Real Federación Española de Tenis, www.fedetenis.es.

Videos

Adult Tennis Programme. (Programme Adultes.). By French Tennis Federation. Authors: William

Bothorel and Nathalie Delaigue. Year: 2001. Language: French. Level: Vets tennis. This is a 29-minute colour video which presents the Vets Tennis Programme of the French Tennis Federation. The contents are: 1. Tennis-discovery: sensation. 2. Tennis-form: fitness, and 3. Tennis – performance: technique and tactics. For more information contact: Fédération Française de Tennis, 2, Avenue Gordon Bennett, 75016 Paris, France. Tel: 33 1 47 43 48 00. Fax: 33 1 47 43 04 94.

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- All those coaches who have attended one of the following workshops:
 - ITF or ETA Regional Workshop in 2000
 - Worldwide Coaches Workshop in Thailand in 2001
 - Tennis Participation Coaches Workshop in Bath in 2000.

Please remember that ITF Coaching & Sport Science Review can be accessed on our website at www.itftennis.com – coaches news – development in subsection "Educational Materials".

Should you have any questions or queries, then please do not hesitate to contact the Tennis Development Department on fax: 44 20 8392 4742 or e-mail development@itftennis.com

13TH ITF Worldwide Coaches Workshop to be held in 2003

GUIDELINES FOR NATIONAL ASSOCIATIONS INTERESTED IN HOSTING THE EVENT

Following the success of the 12th ITF Worldwide Coaches Workshop held in November 2001 in Bangkok, Thailand, the ITF wishes to begin preparations for the next Worldwide Workshop, which will be held around October/November 2003. We wish to invite National Associations interested in hosting this unique educational event to submit their proposed bid in writing to the ITF Development Department before 30 June 2002.

With a view to the event being hosted in the different regions of the world by rotation, preference may be given to applications from countries in Europe and South America, but any National Association, which wishes to apply is welcome to put forward a proposal.

In submitting a proposal to act as host nation for the Workshop, National Associations should consider the following:

1. The venue for the Workshop must be located close to an airport with good international connections.
2. The venue should have a court with seating for at least 300 people for the on-court presentations. An indoor court may be necessary for the on-court presentations if the weather at that time of the year requires it.
3. The venue should have an indoor lecture room, which will seat at least 300 people. Proximity of the lecture room to the court is important.
4. Hotel accommodation at the venue should be reasonably priced and ideally all participants should be accommodated in one hotel.
5. The host nation would be expected to nominate an appropriate English-speaking staff member to help with arrangements and to liaise with the hotel and ITF London in the months prior to the event, and a minimum of two bi-lingual staff members dedicated to working on site with ITF staff throughout the event itself.
6. Proposals should include any additional items which the host nation would be able to provide such as special dinners, free transportation to and from the airport, audio visual equipment, free internet access for participants etc.

All proposals for hosting this event must be submitted directly in writing by the National Association of the country concerned to the ITF Development Department in London by 30 June 2002 at the latest. More detailed Guidelines are available from the Development Department on request (email: eileen.warmington@itftennis.com).



12th ITF Worldwide Coaches Workshop, Bangkok, 2001



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