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The training plan

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1. The training plan

The development of a football player and the preparation of a team are comparable to building a house. In order to achieve the objectives that have been set, the coaching staff have to follow a series of steps that have been scheduled as part of an overall plan.

This is known in the sporting world as **the training plan**.

→ The training plan consists of determining objectives and implementing a set of increasingly detailed procedures with the aim of achieving these objectives.

As with any form of education or teaching, as little as possible should be left to chance with training, even though a fair share of intuition, or “nous” on the part of the coach, also has its role to play in the process.

The planning of his team’s training is therefore an essential task for any coach if he is to ensure that the players progress, that their performance abilities develop, and that they are prepared both individually and as a team for competitive action. This is just as much a task for top-level coaches as it is for youth coaches.

Why plan?

- To decide, after analysis and reflection, on the choice of objectives to be achieved, both for the short and the long term.
- To help ensure a better weighting of the elements covered in the training, in terms of quantity, intensity and quality.
- To prevent improvisation in training work.
- To avoid routine and to give the coaching staff and players reassurance.
- To allow better monitoring of training and to facilitate evaluation.
- To allow the coach to respect and monitor the biological, physiological and psychological factors that determine performance.

Planning of training depends to a large extent on the age of the players, their level of development, the category of competition in which they are playing and the fixture lists for the competitions in which they are involved. However, unlike in individual sports, such planning is not easy to schedule in a team sport like football, where players can be involved in several competitions (domestic league and cup competitions for their club, international club competitions and international competitions with the national team).

High-quality, methodical planning, such as that required by a national team, calls for close co-operation between the coach, the doctor, the dietician and the psychologist.

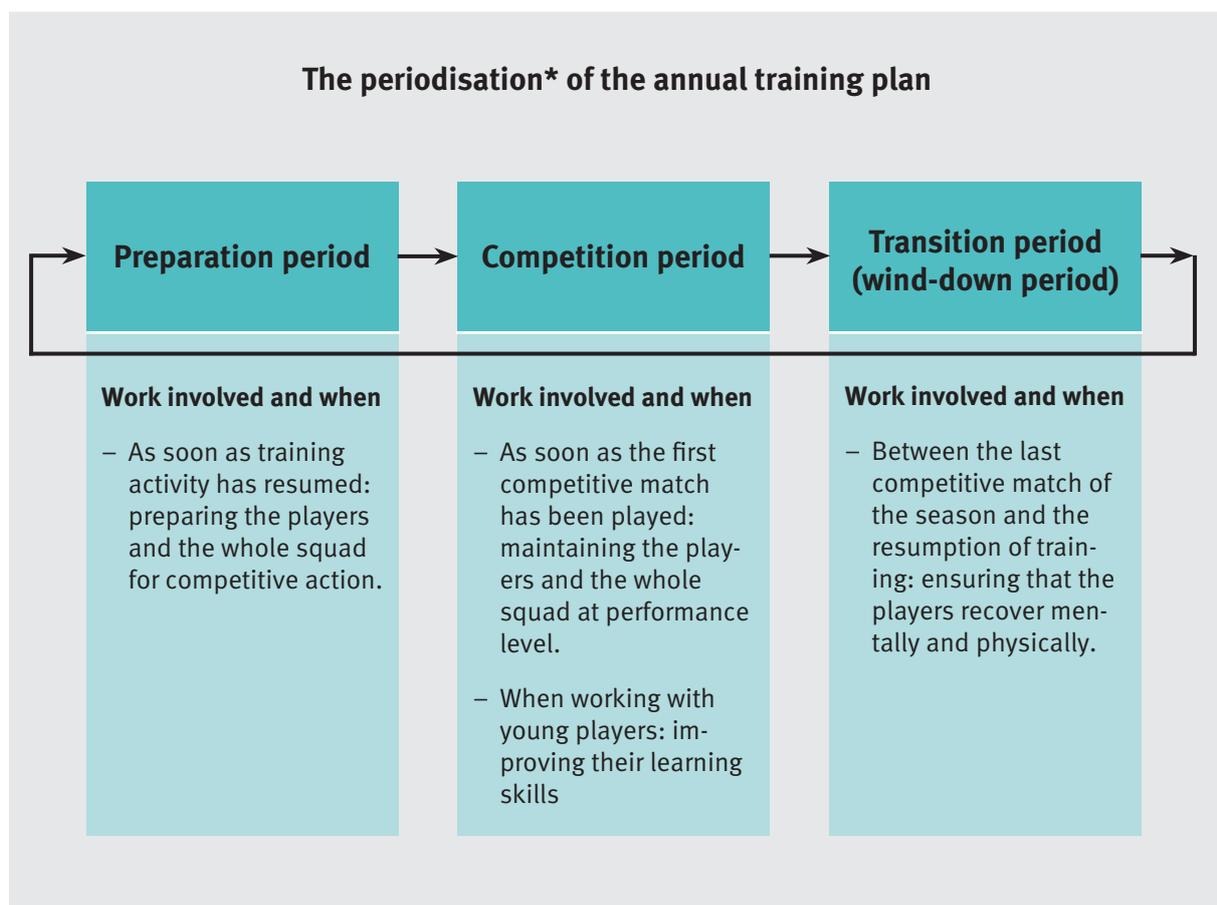
Preparing the Brazilian team for the 2002 FIFA World Cup™

“We had very little time, which made it all the more difficult. Sometimes we ignored the technique and tactics, such as when we spent four whole days on the players’ physical and medical examinations. The aim of this was to obviate any physical problems during the World Cup. We sacrificed coaching for four or five precious days so as to ensure we had a perfectly fit team. I went through this willingly to avoid problems during the competition. And the results speak for themselves. Brazil were fantastically fit – perhaps one of the fittest squads of all. And there were no injuries. What is more, this type of preparation helped me to demand much more of the players during the World Cup. The difference between Brazil and the other teams became evident in the second half of the tournament.”

Luiz Felipe Scolari

1.1 The annual training plan for the season

The annual training plan is the basis for all scheduled training activity, and the coach's first task is to draw up this plan before a new season gets underway. This plan varies from country to country, either because of the structure of the fixture list of the competitions in a given country, or because of cultural, weather and even financial considerations. The plan does, of course, also vary, according to whether the coach is working with top-level professional players or with young players who are still being developed. It does, however, rely on the same methodological principles.



* *Periodisation is a technique of planning the process of training and competition so that the annual training plan is a succession of “periods”, each of which has a different style of activity.*

For coaches working with players at the pre-development/pre-training stage or at the development stage, the annual training plan is based around these same periods as well, but the scheduling of training activities is not geared solely to team performances.

Irrespective of the results achieved by the team, the training objectives that have been set – regardless of whether these are technical objectives, combined technical and tactical objectives or psychological and physical objectives – must remain a priority throughout the season in the planning of training sessions.

Criteria to be taken into account when drawing up an annual training plan

- Playing level, performance age and training age
- The number of players (squad size) available
- The fixture list
- The objectives for performance on the pitch for the season
- The infrastructure, equipment and conditions available for training
- The coaching staff available (coaches, medical support, administration manager, sports psychologist)
- Analysis and assessment of past performances
- Additional criteria to be considered:
 - Sports medical tests
 - Inclusion of preparation or recovery period
 - The social environment of the players (family, place of residence, school, work, lifestyle habits, etc.)

The annual training plan is often subdivided into two or three large cycles (macrocycles), lasting four to six months each, depending on the duration of the annual training plan.

a) *The preparation period*

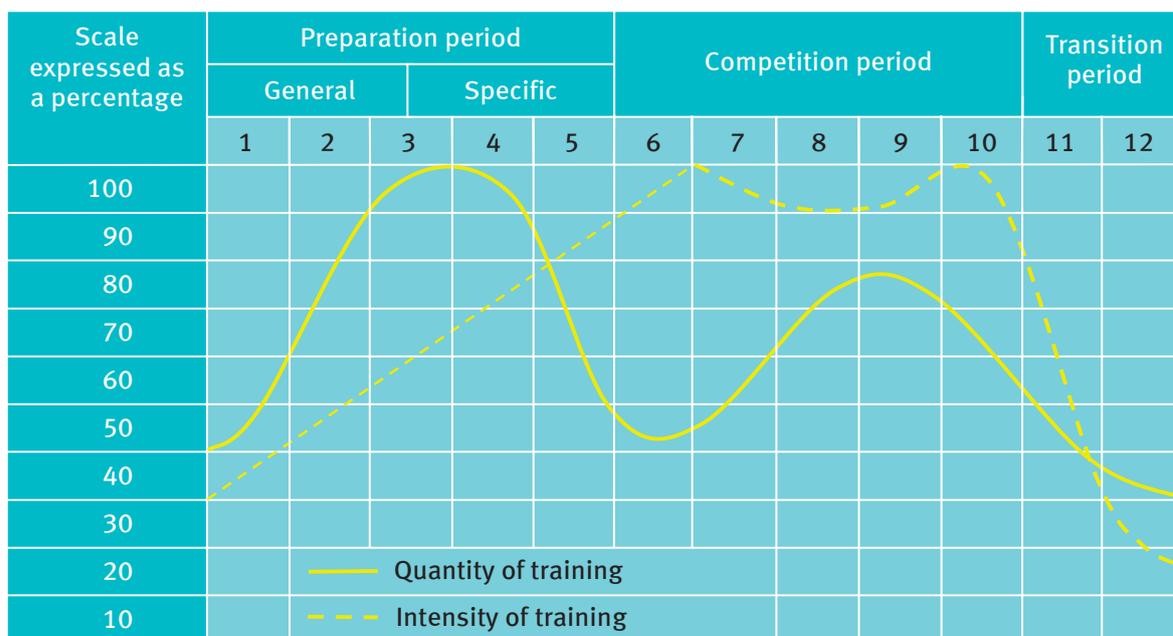
- This is the key period for getting the players and the team as a whole in the right physical condition.
- It should last between 4 and 10 weeks (depending on the level of the players and the level of competition) and must take into account physiological factors. Experience has shown that the first positive effects of training become apparent after 6 to 10 weeks.
- A preparation period lasting 6 to 8 weeks seems to be the norm nowadays in football.
- The period is divided into two phases:

1st phase : – General preparation based around physical work. The quantity of training is decisive for this preparation, i.e. the frequency of training sessions and the duration and volume of training. The training done in this phase is basic.

2nd phase : – This is the pre-competition phase, the phase of specific physical development with the inclusion of technical/tactical and mental aspects. The quantity of training is reduced; the quality therefore comes from the intensity of the work. There are nevertheless many who feel that that quality is often synonymous with quantity and intensity.

This period, which is subdivided into 3 or 4 cycles lasting 1 to 3 weeks each, is known as the preparation mesocycle.

Table 1: Graph showing the relationship between the quantity and the intensity of training in an annual training plan



Dietrich Martin, Trainingsstruktur, Trainingsplanung, Leistungssport 1971

b) The competition period

- The duration of this period depends on the competition schedule.
- It usually lasts between 8 and 10 months (depending on the country and the level of competition).
- The period is subdivided into weekly cycles called microcycles.
- This is the period when general and specific fitness are transformed into match fitness: when players reach optimum performance capacity and seek to maintain this for as long as possible.
- During this phase, the players' need for competitive action is aroused and generated, and they are prepared for coping with the emotions and pressures of competing.
- As the level of performance during this period depends on the commitment of the players in the various competitions and on their own personal potential, the coach has to bear in mind the need to take individual requirements into account in training.
- To ensure the right emphasis in training and to allow the training to be monitored more easily, several of the microcycles in this period become 3 to 4-week competition mesocycles.

In today's game, given the heavy burden placed on players in terms of the number of matches played (many players are involved in at least two matches per week), it is necessary to programme recovery and regeneration cycles into the mesocycle, especially when working with young players.

When players are being developed, learning mesocycles are always programmed into the schedule.

Example: Three-week cycle with the main emphasis on technical aspects: receiving the ball, controlling on the turn and delivering the first pass. Together with the physical and competition-related objectives fixed, this emphasis on technical elements remains a priority in the cycle.

c) *The transition period*

- This is the period when the level of performance drops off and where the player has to be able to recover physically and mentally from the exertions of playing competitive football.
- The period lasts between 4 to 8 weeks (depending on the country and the level at which the players are playing).

This phase is scheduled after a period of competitive activity. However, bearing in mind that 2 to 3 weeks' absolute rest can be sufficient to cause general endurance performance to drop by 20 to 25%, VO₂max by 4 to 6%, as well as causing a decline in overall strength and co-ordination qualities, it is also possible to arrange a programme that allows the players to maintain their fitness level with progressive physical activity.

Example: – Phase 1, lasting between 7 and 14 days

After a few days' complete break (this will depend on the player), introduce rest and recovery with additional sports and activities (an excursion, cycling, swimming, tennis, etc.).

– Phase 2, lasting between 10 and 20 days

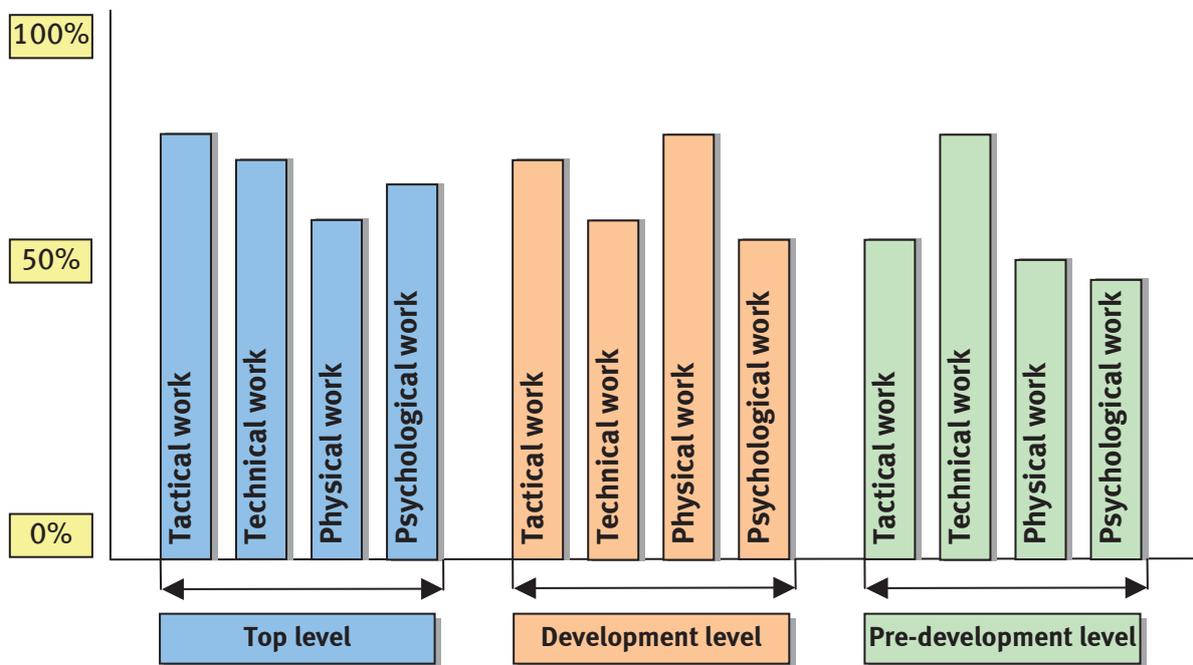
Special, individual programme, concentrating on endurance, suppleness and muscle strengthening.

3 to 4 sessions each week, lasting 45 to 60 minutes at 60–70% of the intensity required during the training phase.

This phase also allows players who have been out injured for a long period or on reduced training to return to performance level during the final period of competition.

Table 2: Graphs showing the distribution in the annual programme of the different elements that make up football training sessions between top-level, professional players, players at the training/development stage and players at the pre-training/development stage

(Jens Bangsbo, 1994)



1.2 The competition microcycle

The microcycle, which is a short, weekly training cycle, stretches over several days and often a whole week.

The microcycle should not be merely a repetition of the previous cycle; it has to have a new foundation, and this also implies that some of the processes, methods and forms of training have to be revamped as well. There obviously also has to be a change with the workload in training.

Microcycles that are linked together over a 3 to 4-week period (thereby forming a mesocycle) can differ from one week to the next. The content of the microcycle is often determined by the team's result, but also by other factors, such as the performance level of the team as a whole or of individual players, or the weather, etc. It is always based on the exertion–recovery process. With young players at the learning stage, the microcycle also has to take into account whatever learning objectives have been fixed for the cycle.

At professional level, and even with young players who are playing international football, the high number of matches – often 2 to 3 per week – makes it necessary to have 3 to 4-day microcycles that are essentially geared to recovery and preparation for the next match.

The structuring of the microcycle – physiological and physical aspects

- Always define the energy pathway that will form the physiological “focal point” of the session.
Example: Technical training with work on aerobic capacity (70–80%).
- Pay attention to the muscles/muscle groups and neuromuscular groups that are being used.
- Begin the cycle, as soon as the match is over, with active recovery based on oxygenation, capillarisation, cardiorespiratory endurance (basic aerobic endurance / aerobic capacity) and muscular endurance (muscle strengthening).
- Work on strength, co-ordination and speed, but with emphasis on rest as well.
- The training “peak” (i.e. the most intensive training) should occur in the middle of the cycle.
- Stimulate muscle toning at the end of the cycle and on the eve of competitive activity (with work on reactive speed, alactic speed and co-ordination).
- Ensure that the emphasis is correctly weighted in the cycle (quantity and intensity).
- Reduce the workload in the second part of the cycle.
- Plan the recovery and energy regeneration phases.

Example of a workout in a microcycle adjusted for football

- Match (it is also possible to hold a brief body and muscle “wake-up session” on the morning of the match)
- Post-match wind-down, active recovery work (low-impact aerobic work)
- Strength (strengthening / power / plyometric work)
- Football / technical work / specific speed work (transformation work)
- Football / technical/tactical work / aerobic-anaerobic work (aerobic power)
- Aerobic endurance (recovery work, e.g. on a bike or another form of exercise)
- Rest period (possibly lasting 1 day and concluding the first half of the microcycle)
- Football / explosive speed and/or specific speed work (multi-form)
- Football / technical/tactical work (preparation for the match)

→ Examples of annual training plans can be found in the attached tables.

Table 3: Example of an annual training plan

Periodisation of training			
Transitional	Preparation		Competition
	Basic	Pre-competitive	
<ul style="list-style-type: none"> • Rest • Holiday 20 to 30 days • The last 15 days <ul style="list-style-type: none"> – Active rest (2 to 3 sessions per week) – Additional sports – Individual training <ul style="list-style-type: none"> › jogging › muscle strengthening › suppleness 	<p style="text-align: center;">Phase 1</p> <p style="text-align: center;">General physical preparation (8 to 14 days)</p>	<p style="text-align: center;">Phase 2</p> <p style="text-align: center;">Specific physical preparation (10 to 15 days)</p>	<ul style="list-style-type: none"> • 30 to 35 weeks
	<p>Cycle 1</p> <ul style="list-style-type: none"> • Basic endurance <ul style="list-style-type: none"> – Aerobic capacity (70 to 80% of MHR) – Continuous and fartlek • Extensive strength <ul style="list-style-type: none"> – Muscle strengthening (conditioning) and light loads – Circuit (circuit training) • Co-ordination + suppleness • Games (Technical/Tactical work) 	<p>Cycle 3</p> <ul style="list-style-type: none"> • Anaerobic alactic + (lactic) (speed endurance, sprint endurance) <ul style="list-style-type: none"> – Interval training • Power and explosive strength <ul style="list-style-type: none"> – Low/high jumps – Multiform (contrasted strength) • Speed (95 to 100%) • Technical/tactical work (collective preparation) • Pre-season warm-up matches (2 to 3) 	<ul style="list-style-type: none"> • 2 x 15 to 18 weeks (professional players) • 2 x 12 to 15 weeks (young players)
	<p>Cycle 2</p> <p style="text-align: center;">Specific physical preparation (10 to 15 days)</p>	<p>Cycle 4</p> <p style="text-align: center;">Concluding phase (8 to 12 days)</p>	<ul style="list-style-type: none"> • 40 to 65 matches
	<ul style="list-style-type: none"> • Aerobic power (80 to 100% of MHR) <ul style="list-style-type: none"> – Interval and intermittent training • Intensive strength <ul style="list-style-type: none"> – with loads – by station • Running and co-ordination exercises • Technical/tactical work • Games • Warm-up match (1 to 2) 	<ul style="list-style-type: none"> • Matches (2 to 3) • Technical/tactical work • Tactical work <ul style="list-style-type: none"> – With the whole team • Speed-strength <ul style="list-style-type: none"> – Alactic speed (100%) • Aerobic refresher session (1 to 2 sessions) 	<ul style="list-style-type: none"> • 6 to 8 mesocycles lasting 3 to 4 weeks each • Microcycle of 5 to 7 sessions per week • Training objectives <ul style="list-style-type: none"> – Competitive activity (matches) – Learning • Physical cycles <ul style="list-style-type: none"> – Aerobic – Speed-strength – Aerobic-anaerobic

Table 4: Example of a competition microcycle with one match played per week

MON	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY	SUNDAY
MORNING						
<i>Rest</i>	<ul style="list-style-type: none"> • Physical work <ul style="list-style-type: none"> – Aerobic endurance – Strength – Muscular power • Technical/tactical work • Game (aerobic) 	<ul style="list-style-type: none"> • Physical work <ul style="list-style-type: none"> – Anaerobic speed – Speed-strength • Technical work <ul style="list-style-type: none"> – Work in front of goal • Game 	<i>Rest</i>	<ul style="list-style-type: none"> • Physical work <ul style="list-style-type: none"> – Speed (reaction) • Technical/tactical work • Tactical work <ul style="list-style-type: none"> – Team unit – Dead-ball situations • Game 	<p>→ The following may be included as well:</p> <ul style="list-style-type: none"> • Muscle and body “wake-up session” • Tactical work <ul style="list-style-type: none"> – Repetition of work already practised 	<ul style="list-style-type: none"> • Recovery session for the whole team (warming-down) • Technical/tactical work with physically challenging work for the players who did not play in the match
AFTERNOON						
<i>Rest</i>	<ul style="list-style-type: none"> • Technical/tactical work <ul style="list-style-type: none"> – Keeping the ball – Attack – defence with physically challenging work • Game • Aerobic refresher session 1 to 2 sessions per month 	<ul style="list-style-type: none"> • Technical tactical work <ul style="list-style-type: none"> – Game – Finishing – Pressing – Other drills – Drills where the players are physically challenged (aerobic power) or • Internal match 	<ul style="list-style-type: none"> • Technical work <ul style="list-style-type: none"> – Individual work by position • Tactical work <ul style="list-style-type: none"> – by line (defence, attack, etc.) – Dead-ball situations → Wind-down session 	<i>Rest</i>	Match	<i>Rest</i>
<p>→ If there is no “wake-up” session before the match, the Friday morning session can be held in the afternoon.</p>						

Table 5: Example of a competition microcycle with two matches being played per week

MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY	SUNDAY
MORNING						
<ul style="list-style-type: none"> • Recovery session for the whole team (post-match wind-down) • Technical/tactical work with physically challenging work for the players who did not play in the match 	<ul style="list-style-type: none"> • Technical <ul style="list-style-type: none"> – Co-ordination • Physical work <ul style="list-style-type: none"> – Muscle toning – Liveliness • Tactical work <ul style="list-style-type: none"> – Work with the whole team – Dead-ball situations 	<ul style="list-style-type: none"> • Muscle and body “wake-up” session • Tactical work <ul style="list-style-type: none"> – Refresher session 	<ul style="list-style-type: none"> • Recovery session for the whole team (post-match wind-down) • Physical work • Technical/tactical work for players who did not play in the match 	<p>→ The following may be included as well:</p> <p>Individual session or team tactical session</p> <ul style="list-style-type: none"> – (video) 	<ul style="list-style-type: none"> • Physical work <ul style="list-style-type: none"> – Toning – Speed (reactive) • Tactical work <ul style="list-style-type: none"> – Whole team – Dead-ball situations • Game 	<p>→ The following may be included as well:</p> <ul style="list-style-type: none"> • Muscle and body “wake-up” session
AFTERNOON						
<i>Rest</i>	<i>Rest</i>	Match	<i>Rest</i>	<ul style="list-style-type: none"> • Technical and physical work <ul style="list-style-type: none"> – Muscle strengthening – Co-ordination – Work in front of goal • Technical/tactical work <ul style="list-style-type: none"> – By team unit – Attack – defence • Game 	<i>Rest</i>	Match

Table 6: Example of a competition microcycle for players at the learning phase (15-17 years of age)

DAY 1	DAY 2	DAY 3	DAY 4	DAY 5	DAY 6	DAY 7
MORNING						
<i>Rest</i>	<i>Rest</i> or • Individual session – Technical work (work on the basics)	<ul style="list-style-type: none"> • Physical work <ul style="list-style-type: none"> – Alactic speed • Technical work <ul style="list-style-type: none"> – Finishing 	<ul style="list-style-type: none"> • Specific session <ul style="list-style-type: none"> – Co-ordination – Technical work (with individual positions) 	<i>Rest</i>	<ul style="list-style-type: none"> • Technical/tactical work <ul style="list-style-type: none"> – Whole team • Technical and physical work <ul style="list-style-type: none"> – Reactive speed • Game <ul style="list-style-type: none"> – Emphasis on cognitive aspects and free play 	
AFTERNOON						
<ul style="list-style-type: none"> • Recovery session (warming-down) <ul style="list-style-type: none"> – Aerobic work refresher – Co-ordination – Suppleness – Treatment-massage 	<ul style="list-style-type: none"> • Physical work <ul style="list-style-type: none"> – Strength (individualised work) • Technical work <ul style="list-style-type: none"> – Basic aspects • Game (aerobic) 	<ul style="list-style-type: none"> • Technical/tactical work <ul style="list-style-type: none"> – Attacking play – Defensive play • Game <ul style="list-style-type: none"> – Work on finishing (shooting) 	<ul style="list-style-type: none"> • Technical and physical work <ul style="list-style-type: none"> – Aerobic-anaerobic • Game <ul style="list-style-type: none"> – Played on a reduced-size pitch <p style="text-align: center;">or</p> <p style="text-align: center;">Internal match</p>	<ul style="list-style-type: none"> • Technical work <ul style="list-style-type: none"> – Foot-tennis – Individual work (emphasis on the player’s wrong foot and heading) • Tactical work <ul style="list-style-type: none"> – Team units – Dead-ball situations <p style="text-align: center;">Day off Every 3rd week</p>	<i>Rest</i>	Match

Table 7: Example of a recovery microcycle

DAY 1	DAY 2	DAY 3	DAY 4	DAY 5	DAY 6	DAY 7
MORNING						
	<i>Rest</i>	<ul style="list-style-type: none"> • Specific session – Strength work (general muscle strengthening) – Co-ordination – Individual technique – Foot-tennis 	<i>Rest</i>	<i>Rest</i>	<ul style="list-style-type: none"> • Physical work – Toning – Reaction (liveliness) • Tactical work – Team unit – Dead-ball situations • Game 	<i>Rest</i>
AFTERNOON						
<ul style="list-style-type: none"> • Recovery session – Oxygenation session (e.g. running in the forest) – Suppleness – Muscle strengthening (upper body) 	<i>Rest</i>	<ul style="list-style-type: none"> • Physical work – Alactic speed work (integrated) • Game – Played on reduced-size pitches 	<ul style="list-style-type: none"> • Technical and physical work – Aerobic work (refresher session) • Game (aerobic work) – Technical/tactical work 	<ul style="list-style-type: none"> • Tactical work – Attacking play – Defensive play – Attack – Defence • Technical work – By position • Game – Unrestricted play and with instructions – “Toro” (Piggy in the middle) (5 v 2 / 6 v 2) 	<i>Rest</i>	Match

Table 8: Example of a mesocycle at the pre-development/ pre-training stage, with learning objectives

Period	Technical work	Tactical work	Physical work	Mental work
WEEK 1 4 sessions + 1 match	<ul style="list-style-type: none"> • Technical circuit <ul style="list-style-type: none"> – Running with the ball – Dribbling • Individual ball juggling with 2 to 3 players • Work on the long pass (Sequence of long pass, control, running with the ball and/or making the second pass) 	<ul style="list-style-type: none"> • Keeping possession in a team with numerical supremacy (game with roving players changing sides) • 1 v 1 duels in front of goal with shooting • Organisation of the team unit 	<ul style="list-style-type: none"> • Endurance • Speed Running exercises (basic exercises) • Co-ordination using the ball (with one or two players) • Suppleness and stretching • Strength (muscle conditioning, upper body strength) 	<ul style="list-style-type: none"> • Individual discussion with each player – Assessment of the previous training cycle
WEEK 2 3 sessions + 1 match and 1 tournament	<ul style="list-style-type: none"> • Individual ball juggling with 2 to 3 players • Foot tennis • Work on the long pass – Sequence of long pass, control and shooting on goal 	<ul style="list-style-type: none"> • Small-sided games (with and without goals) <ul style="list-style-type: none"> – With use of extra players (floaters) – With shooting on goal • Organisation of the team (Preparation of the team for the tournament) 	<ul style="list-style-type: none"> • Integrated speed <ul style="list-style-type: none"> – Reactive speed • Co-ordination using the ball (with one or two players) • Mobility and suppleness 	<ul style="list-style-type: none"> • Managing “life hygiene” and diet during an intensive period (a match during the week + a tournament) • Willpower, aggressiveness and perseverance
WEEK 3 5 sessions + 1 match	<ul style="list-style-type: none"> • Juggling and ball control (receiving the ball) • Heading <ul style="list-style-type: none"> – Handball game + goals scored from headers • Work on long passes and on crossing + finishing from crosses 	<ul style="list-style-type: none"> • Moving the ball around and retaining possession • Attacking play from the flanks • 5 v 5 game • Organisation of the team 	<ul style="list-style-type: none"> • Speed <ul style="list-style-type: none"> – Running exercises (basic exercises) – Integrated speed (receiving the ball from crosses and shooting) • Strength (upper body strengthening) • Co-ordination using the ball (with one or two players) • Stretching (basic stretching exercises) 	<ul style="list-style-type: none"> • Effort – concentration • Enjoyment – self-confidence • Laws of the Game
WEEK 4 3 sessions + 1 match	<ul style="list-style-type: none"> • Juggling <ul style="list-style-type: none"> – Tests • Play in front of goal <ul style="list-style-type: none"> – Crossing and finishing from crosses (heading and volleying) • Foot tennis 	<ul style="list-style-type: none"> • Moving the ball around and retaining possession • Dead-ball situations (technique) • Internal game (9 v 9) 	<ul style="list-style-type: none"> • Aerobic endurance <ul style="list-style-type: none"> – Running + running with the ball with a change of tempo – Strength (strengthening of the legs) • Suppleness and stretching 	<ul style="list-style-type: none"> • Monthly assessment <ol style="list-style-type: none"> a) By the whole group b) Individual (self-assessment)

1.3 The training session

The training session forms part of the microcycle and lies at the heart of the weekly training plan. Each day, the coach has to structure and plan his session around his objectives for that day, his medium and long-term learning objectives, as well as taking into account the physiological, physical and mental strains on the team. The training session has to be varied – not in respect of the objectives, but certainly as far as the methods and forms of training to be used are concerned. It should last between 80 and 100 minutes in total, depending on the type of session, the objectives and the training cycle.

The training session comprises three phases

a) *The warm-up or limbering-up phase*

This is the preparation part of the session. It has to be progressive, with an initial period of running and varied movement, with or without the ball, and at a slow to moderate tempo to stimulate the body's organs and systems. This is followed by loosening up and co-ordination exercises; the tempo is then gradually increased with exercises specifically adapted for football based on technical skills or on different game situations. When working with young players, separate co-ordination and integrated co-ordinated work with the ball must be included in the limbering-up phase.

There is nearly always a link between the content of the warm-up phase and the objectives set for the performance phase.

→ This phase lasts between 15 and 20 minutes.

b) *The performance phase*

This is the main part of the session. During this period, the main emphasis is on training and instruction, with clearly defined objectives. The content (games, drills and learning activities) has to be tailored to the objectives, but it must come close to the real match situation. Correct emphasis has to be placed on the various training activities, not only as regards volume, but also the duration and intensity of the activities. Coaches must ensure that during recovery periods, which are usually active, the players use the ball as often as possible; this is especially the case for young players.

At training/development level, but mainly at pre-training/pre-development level, the football played must be at the heart of the whole training process. It should take up between 50% and 60% of the total duration of the session, although the coach must also ensure that the players equip themselves with the necessary technical, tactical and mental skills using progressive, analytical exercises. In training, play improves when there is a better distribution between practice games on large and reduced-size pitches and training exercises.

Example: Once the players have completed repeated drills and gone through simulated match situations in a training exercise that focuses on shooting at goal, a small-sided game will help them to put the finishing skills that they have worked on into practice. Shooting on goal should therefore be included as a topic of emphasis in the practice game, thereby allowing the players to reproduce real match situations.

It is up to the coach to work out an optimum combination alternating between practice games, analytical exercises and other forms of playing, or between separate forms of training without the ball and integrated forms of training with the ball.

In this phase of acquisition and learning, the quality of the coaching (i.e. the commitment shown by the coach, his ability to intervene in the right place and at the right time, the precision of the corrections that he makes and his overall dynamism) will ensure active commitment on the part of the players and the success of the training objectives set.

- The duration of this phase varies. It generally lasts 50–60 minutes or up to 70 minutes, depending on the objectives, the day on which the session is being held, the weather conditions, local customs, and even how the coach feels.

c) *The cooling-down phase*

This is the phase of physical and mental relaxation. It usually takes place on the pitch and includes some light group jogging and limbering down and muscle-stretching exercises. The players then have hydration or energy drinks as the first step to aid recovery.

This phase serves an educative purpose with young players as well, in that it teaches them about their own well-being and how to respect their bodies. It is also the moment chosen by the coach to give his assessment of the session, to fix new objectives or simply to communicate with his players.

- The duration varies between 10 and 15 minutes.

Tables 9 and 10 provide examples of training sessions.

Table 9: Organisation of a training session at pre-training/pre-development level

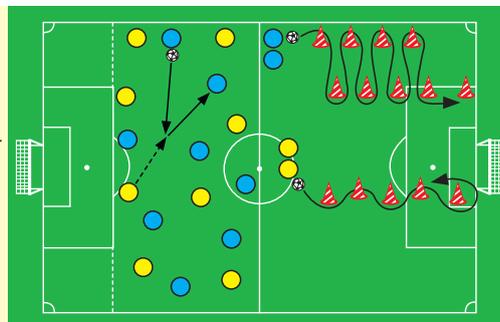
PHASE 1 WARM-UP	PHASE 2 PERFORMANCE (Training + instruction)			PHASE 3 COOLING-DOWN
Limbering-up	Setting the situation	Learning	Game / Match	Relaxation
Preparation of the players	Practice game	Analytical work	More playing action	Individual winding-down
<p>PSYCHOMOTOR SKILLS</p> <ul style="list-style-type: none"> – neuromuscular and body “wake-up” session – technical and cognitive stimulation – mental preparation 	<p>TACTICAL SENSE DEVELOPING AWARENESS</p> <ul style="list-style-type: none"> – reproducing the reality of the match situation – technical/tactical awareness work – space – time – unrestricted game – game with specific instructions 	<p>CO-ORDINATION TECHNICAL, TACTICAL COGNITIVE AND MENTAL</p> <ul style="list-style-type: none"> • Depending on the training objectives – improving technical/tactical capacities – development of physical capacities 	<p>APPLICATION OF TACTICS</p> <ul style="list-style-type: none"> – game with a fixed theme – supervised/ directed game – free game with no restrictions <p>or</p> <p>Internal match</p>	<p>RECOVERY</p> <ul style="list-style-type: none"> – physical and mental relaxation – slow running + recovery exercises – suppleness / stretching – relaxation
<ul style="list-style-type: none"> – running and movements with the ball – suppleness – game 		<ul style="list-style-type: none"> – game-related drills, actions and combinations – play sequences – with physical demands placed on the players 		<ul style="list-style-type: none"> • Organisation – as a whole team – in groups
<ul style="list-style-type: none"> • Organisation – individually – in groups – whole team 		<ul style="list-style-type: none"> • Organisation – integrated form – individually in twos, threes, fours – in groups – with the whole team – by position – in stations – interval training – circuit training 		
COACHING – INSTRUCTION				
Imitation	Leadership	Imitation	Creativity	Discussion
Free expression	Correction	Guided discovery	Spontaneity	Assessment
Observation	Demonstration	Demonstration	Observation	Tidying up of material
		Correction	Correction	
		Leadership		

Table 10: Example of a technical training session at the pre-training/development stage (13-15 years of age)

Objectives: Improving passing and control on the turn after receiving the ball **Duration: 90'**

1. Technical warm-up (15')

- 2 teams of 8 players pass to each other with a maximum of 2 to 3 touches allowed per player. The ball is passed to a player wearing a different colour.
- The game is played with 1, 2 and 3 balls.
- The emphasis is on movement (running off the ball into space, decoy runs), receiving the ball, controlling the ball and passing accurately along the ground).
- The players complete a co-ordination obstacle course in 2 groups (both with and without the ball).
- Suppleness and stretching.

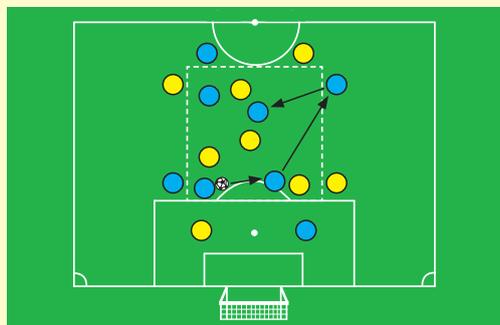


2. Introductory practice game routine (15')

- 2 teams of 8 players: 4 v 4 game on a marked-out playing area. - Unrestricted play (then 3 touches maximum per player), with the aim of retaining possession within the team. The extra players standing outside of the square are allowed 1-2 touches only and must always play the ball to players in their team. The game lasts 3' - 4', after which the players are switched. - The coach counts the number of successful passes. → Emphasis is on the quality of ball control and passing, and also of the players' movement.

Variation:

- The extra player who receives the ball outside the square can enter the square with the ball. - The player who has passed the ball to him then takes his place as an extra.

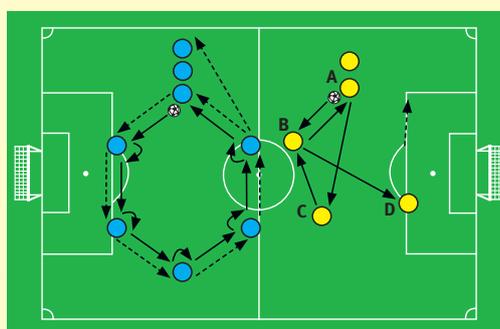


3. Technical exercise: controlling, passing and following up (15')

- 2 groups of 8 players positioned in a hexagon formation, with 10 to 15 metres between the players.
- The ball is passed along the ground to a team-mate's feet. He controls on the turn, immediately passes it on (maximum of 2-3 touches), and then follows up the pass. The exercise can also be performed using 2 balls (with emphasis on rhythm).
- Players should vary how they receive the ball (inside and outside of the foot) and how they pass it (left and right foot). Emphasis is on moving rhythmically.

Variation (with the yellow group of players):

- A direct pass followed by a lay-off, i.e. A plays the ball to B, who lays it back to A.
- A plays the ball long to C, who lays it off to B, etc. The players are constantly on the move.

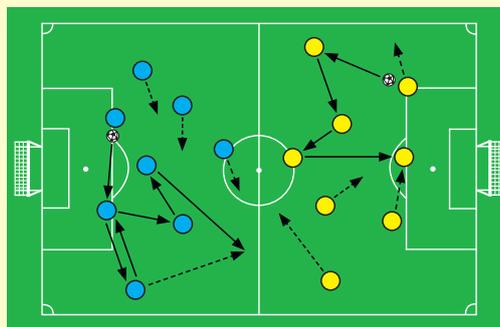


4. TE/TA exercise: receiving the ball and passing while moving (10')

- 2 groups of 7 to 8 players in one half of the pitch. - The players are positioned according to the playing system chosen by the coach (e.g. 3-4-1). - The ball is circulated among the team, with 1 to 2 touches allowed per player. All the players are constantly moving, and the team remains in a compact formation. The players change position all the time.
- Emphasis is on playing the ball while running, switching play and varying passes. The players should work on passing in a triangular formation, running off the ball into space and onto the ball, short and long passing sequences.

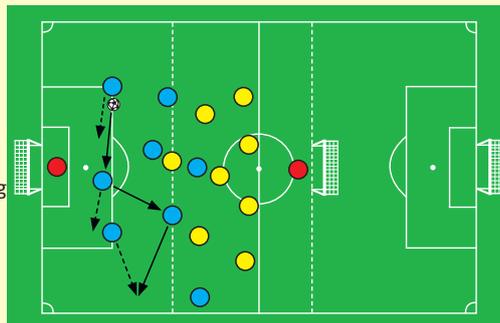
Variation:

- Introduce 2 or 3 more players to provide opposition.



5. Concluding match (20')

- 8 v 8 (7 v 7) with 2 goalkeepers: 3 ball touches allowed per player. - Goals scored from normal build-up play are worth 1 point; goals scored from a direct shot (volley) are worth 2 points. - The coach should vary the game organisation. Unrestricted play can be introduced for the last 8 to 10 minutes.
- The coach has to get the players to work on movement, escaping markers, running off the ball and also insist on high-quality passing technique (first-time balls).



6. Cool-down (10')

- One lap of gentle running around the pitch. - Recovery stretching.
- This session can be led by a player.

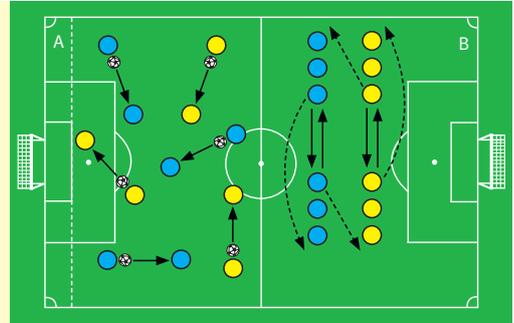
Table 11: Example of a combined technical training session at the training/development stage (16-18 years of age)

Objectives: Working on ball control, passing and finishing

Duration: 90' - 95'

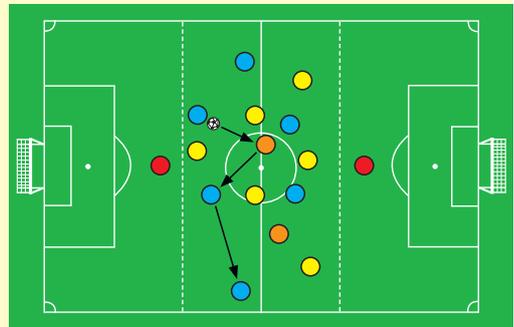
1. Technical warm-up (20')

- 1 ball per pair of players: The players practise passing on the move, with 2 touches allowed per player.
- Standing on the spot: One player throws the ball to his partner, who then volleys or heads the ball back.
- Passing between 2 players: the players work on weighting the pass and vary the distances and trajectories of their passes.
- Dynamic suppleness and stretching.
- Aerobic technique: first-time or second-touch passing and varied runs (2x4) [Pitch B].
- Players must always work with both feet.



2. Practice game routine: retaining possession (15')

- The teams play 6 v 6 (7 v 7) on a marked out playing area + 2 neutral floating orange players (who are allowed 1 touch only) + 2 goalkeepers
- The players attempt to retain possession, with 2 touches allowed for each player: after 7 or 8 passes, they attempt to pick out one of the extra players (goalkeepers) with a long pass along the ground (worth 1 point).
- After the point has been scored, play is restarted by the opposing team.
- The players remain in their positions (occupying the zones)

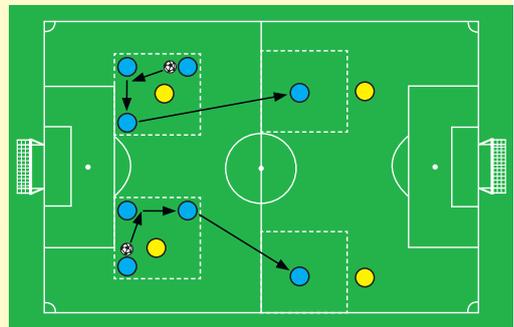


3. Exercise to work on long and short passing (15')

- Groups of 6 players, with 4 marked-out, 15 x 15 m playing areas. - The players play 3 v 1 in two of the playing areas: after 6 to 8 passes (or a signal), a blue player plays the ball to his partner in the square in the opposite half of the pitch (the distance must be sufficient for a long pass to be made). Two players then join their team-mate in the other square to produce numerical supremacy. As soon as the blue player has controlled the ball, the yellow defender joins the game to challenge the blue players (in a 3 v 1 game). - The defenders are switched every 2'.
- Emphasis is on the quality of passing along the ground and triangular passing and movement.

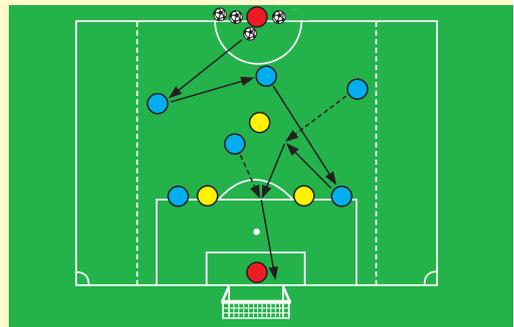
Variation:

- Players can vary the type of pass (diagonal passes, long balls, high balls in the air).



4. Simulated match situation: passing and finishing (15')

- Marked out playing area: 6 blue attackers and 3 yellow defenders + 2 goalkeepers.
- The blue team plays (3 touches maximum allowed) and tries to score.
- When the yellow team gains possession, it plays normally with no restrictions and attempts to play a long pass to the 2nd goalkeeper, who waits to receive the ball.
- Roles are switched every 3' to 4'.
- The blue team has to find solutions (trying to play the ball long and making a good-quality final ball). The coach then gets the players to work on a particular combination. The defenders are semi-active.
- The coach should limit the number of touches allowed before finishing off the move and impose a time limit on each attempt.

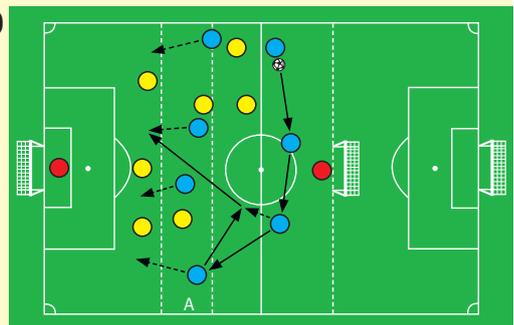


5. Putting everything into practice: 7 v 7 (or up to 8 v 8) game (20')

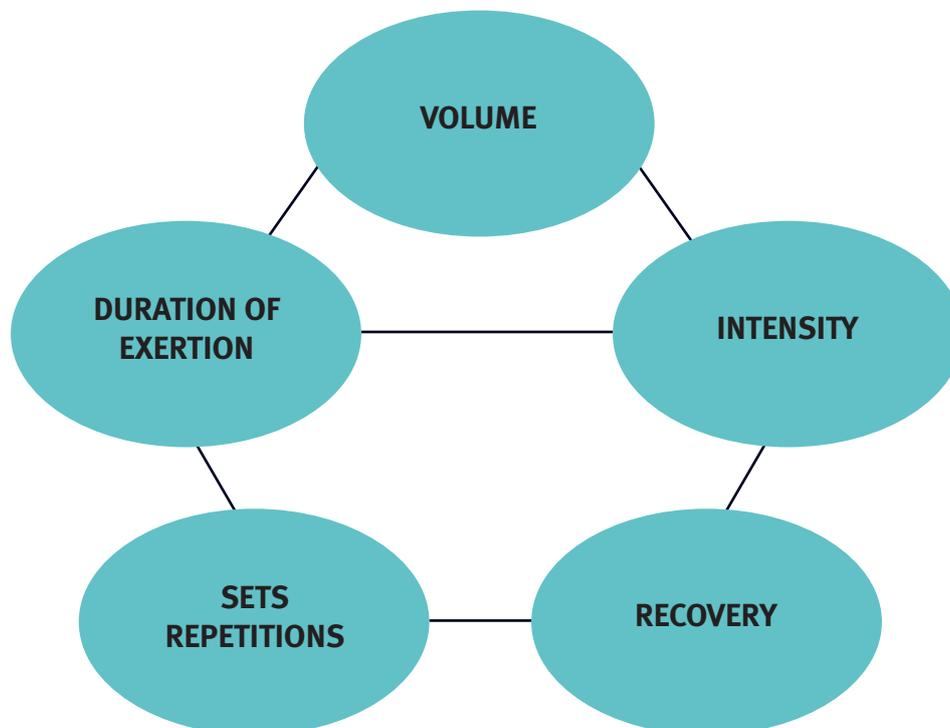
- Marked out playing area with a central zone - A (15 metres wide).
- Game with 2 (or 3) touches allowed for the team in its defensive zone; unrestricted play in the other zones.
- Both teams try to score.
- A goal scored from normal build-up is worth 1 point; a goal scored from a long ball played across the central zone A is worth 2 points.

6. Cool-down (10' - 12')

- Gentle running for recovery.
- Intensive stretching.



1.4 Getting the emphasis right in training



- Volume:** All the efforts made by the players in training under exertion; the total quantity/duration of work done.
(e.g.: Volume of aerobic endurance work: 40 minutes)
- Duration:** Time taken for an action of physical exertion to be carried out at the required intensity without rest.
(e.g.: Duration of the exercise: 15 minutes)
- Intensity:** The extent of the physical exertion, the tempo to be applied, the resistance to be overcome.
(e.g.: 80% of a maximum weight, 90% of maximum speed, 80% of MHR)
- Repetition:** The number of times that a physical exertion, an exercise or a learning activity is repeated.
(e.g.: 5 repetitions of 30m, 20 x abdominals, 10 x attacking play drills)
- Set:** Total number of repetitions performed at the same tempo.
Several repetitions form one set.
(e.g.: 5 (five) 30 metre-repetitions, 3 sets. 100% intensity; total distance: 450 metres
Muscular strength with squats, ten 80-kg repetitions, 5 sets)
- Recovery:** Time allocated for the recovery period.
Rest period taken between repetitions.
Rest period taken between sets (longer than that between repetitions).

The recovery phase is often an active period; it is dictated by the intensity, the volume and the duration of the physical exertions undertaken.

Table 12: Criteria that have a bearing on the intensity of the training load in football



Practice games in training that are played as “competitive matches” (focusing on technical, tactical, cognitive and mental aspects) represent a substantial workload.

2. Recovery and regeneration

As is the case with any form of effort, physical exertion calls for a period of rest and recovery afterwards, to allow the individual to regain energy and rediscover his strength.

In sport, recovery is absolutely essential and forms an integral part of the training process. In the planning of the training mesocycles and microcycles, “wind-down” phases are often programmed and held as part of specific sessions to help the players regenerate energy, both biological and mental. These sessions are most frequently held on the day following the match or in the middle of the week during a block of intense training, and even in a micro-session immediately after the main training session during the cooling-down phase.

If it is well planned, this recovery/regeneration process can help prevent slack periods or fatigue and over-training syndrome.

These sessions, which are also known as a “cooling-down” or oxygenation session, revolve around physical and mental recovery. The principal aims behind the sessions are the following:

- Preventing and eliminating fatigue.
- Reducing the amount of lactic acid and other toxins in the muscles.
- Oxygenating the muscles (capillarisation, flushing out).
- Lowering stress
- Boosting concentration.
- Reducing the risks of injury.
- Regenerating and energising the tissues

→ After intensive exertion, the muscles need at least 48 hours to restore their glycogen reserves. It is, however, possible to lower this time by 24 to 30 hours with specific oxygenation and recovery training, based around running or another form of aerobic exercise, and with a carbohydrate-rich diet.

Recovery time for different physical qualities

Endurance (aerobic capacity)	24 to 30 hours
Endurance (aerobic power)	40 to 48 hours
Anaerobic alactic speed	24 hours
Anaerobic lactic speed	48 to 72 hours
Maximum muscle strength	40 to 48 hours
Speed – strength (explosive)	24 to 36 hours

Recovery training (regeneration)

a) *On the day after a match or after an intense training session*

- **Light running**, 50 to 60% of MHR (HR of 120 – 140), lasting between 20 and 30 minutes. If the running takes place in a rural setting or a forest, the quality of oxygenation will be improved. This running can be substituted, especially with young players, by some light technical work: running, passing or foot-tennis. Other additional activities, such as cycling, swimming or water gymnastics, can prove beneficial for post-match wind-down. Depending on the physical and mental state of the team, unrestricted (free) practice games with no extra workload can be used to complement the running work.

Example: 15 to 20 minutes of running and 15 minutes of playing

- **Stretching / Mobility**

Stretching causes the muscle tonus to normalise, the muscles to regain their shape, the blood to circulate better and the regeneration process to kick in more easily. Stretching time here is longer (15 to 30 seconds).

- **Massage**

After the active recovery phase (followed by a shower and possibly a hot bath), a massage is obligatory. This massage session should last between 20 and 30 minutes; it eliminates muscle contractures, and muscle tonus is regulated.

b) *Immediately after training*

- Light running is possible here (HR of 120 – 140), lasting between 6 to 12 minutes on the pitch or a nearby location (hard surfaces should be avoided).
- Moderate or heavy stretching, depending on the session.
- Another activity: e.g. a penalty shooting session. When working with young players in particular, the coaching staff should ensure that the players help to tidy away the equipment used in training and clean the balls. These tasks help the players to return to a normal emotional state, while also lowering their mental stress.

c) *Active recovery during training*

This recovery phase, immediately after an exercise or game, helps to eliminate waste products caused by exercise (e.g. lactic acid) and helps to regenerate energy levels. Based around walking, slow running, juggling and stretching exercises, this form of recovery is recommended after speed exercises, shooting on goal (strength) and other aerobic power sessions (i.e. running or playing on reduced-size pitches).

d) *Other methods of recovery and regeneration*

- Additional, extracurricular pursuits away from normal footballing activities, such as swimming, water gymnastics, cycling, walking in the mountains or at the seaside.
- Sauna, underwater massage, saltwater baths.
- Specially adapted diet and fluid intake (providing carbohydrates, mineral salts and vitamins) to be consumed as soon as possible after the match or training session (for hydration purposes).
- Sleep (8 to 10 hours for a healthy, regenerating sleep)
- Relaxation techniques: sophrology, Autogenic training, Eutonia, visualisation, self-hypnosis, breathing and concentration techniques and yoga. These techniques are used on an individual basis.
- A healthy and balanced lifestyle, including leisure activities.

Table 13: Example of a recovery training session on the day following the match (post-match wind-down)

Duration: 60 to 70 minutes	Low intensity (50% to 70% of MHR)
Oxygenation phase (30 - 35 minutes)	
<ul style="list-style-type: none">• 5 minutes' walking• Light to moderate running for 10 to 12 minutes (at HR of 120 – 140) or another form of endurance (e.g. 30 – 45 minutes' cycling)• Dynamic suppleness (not sudden movements) for 5 minutes• Light to moderate running for 10 to 15 minutes (at HR of 140 – 160) or running with the ball or simple passing• Other interesting forms of training<ul style="list-style-type: none">– Handball at walking pace (scoring with headers or with volleys from crossed balls)– Football at walking pace (direct shooting/heading on goal)	
“Reactive” play activity (10 - 15 minutes)	
<ul style="list-style-type: none">• Foot tennis (with a low net)• 6 v 2/8 v 2 (low-intensity game of <i>Toro</i>)	
Muscle toning (10 minutes)	
<ul style="list-style-type: none">• By muscle strengthening (using body weight) for the upper body• Reactive co-ordination of the legs/feet (short distance)	
Muscle stretching (10 - 15 minutes)	
<ul style="list-style-type: none">• With intensive stretching, followed by relaxation exercises	
Additional forms of recovery	
<ul style="list-style-type: none">• Bath or shower• Sauna• Massage	

