

Some Aspects of Coaching in the 21st Century

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Some Aspects of Coaching in the 21st Century

- Introduction
- Some Myths of training
- Coaching and the coach
- Alternative Coaching Strategies

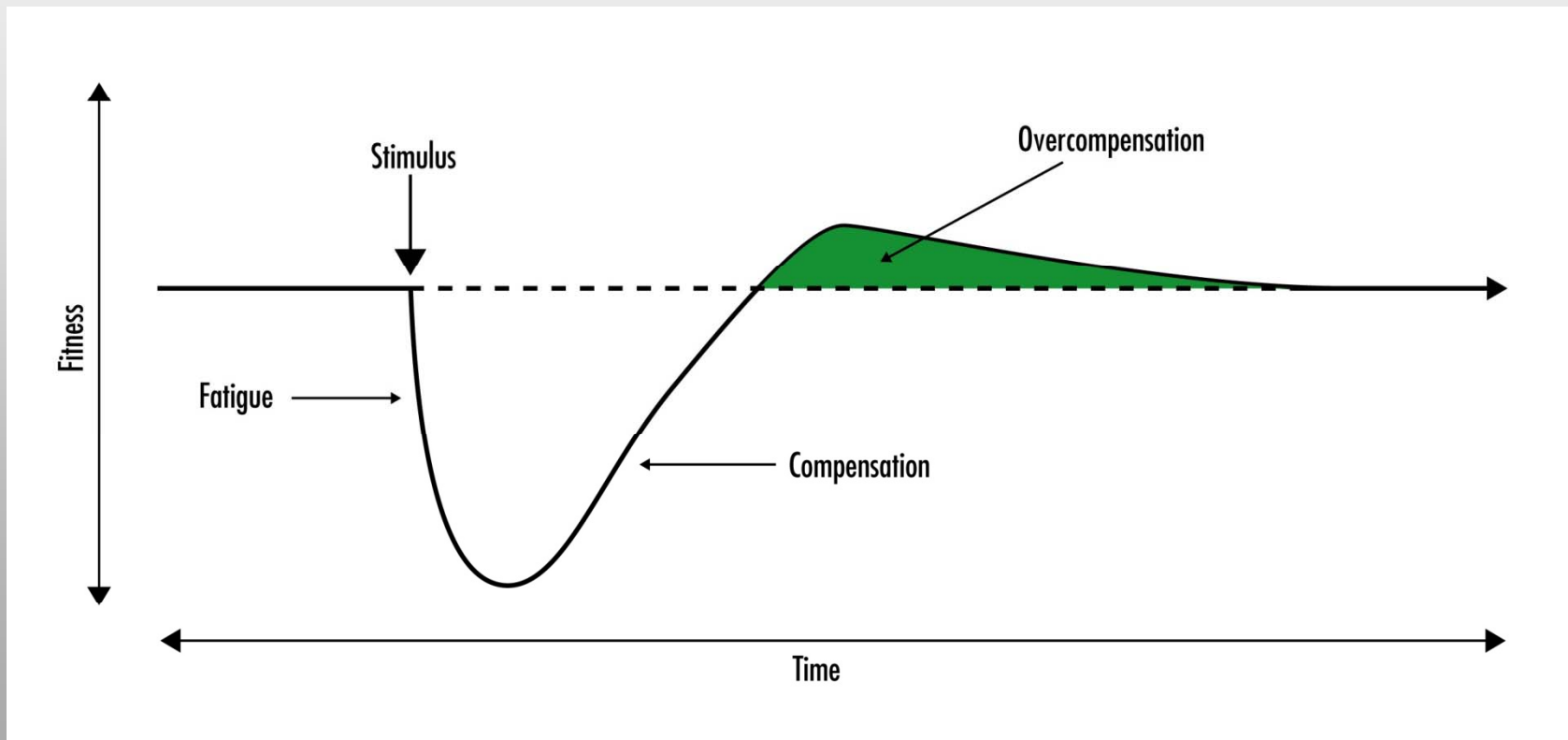


Some Myths of training



1 - The Overcompensation Myth

- This is what we believe



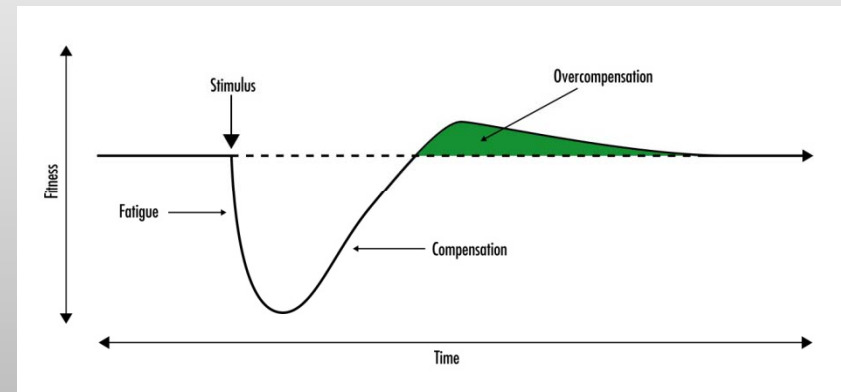
This is what we know

- The body is capable of adaptation to training loads
- Training loads of the correct intensity and timing cause overcompensation
- Training loads that increase progressively cause repeated overcompensation and higher levels of fitness
- There is no increase in fitness if loading is always the same or too far apart
- Overtraining or incomplete adaptation occurs when training loads are too great or too close
- Adaptation is specific to the specific nature of the training



This is what we don't know

- What is the amount of fatigue necessary for adaptation?
- What is energetic fatigue - what is neuronal fatigue?
- What is the time span for regeneration?
- What is the duration of “overcompensation”?
- What about individual variation?



2 - The Periodisation Myth

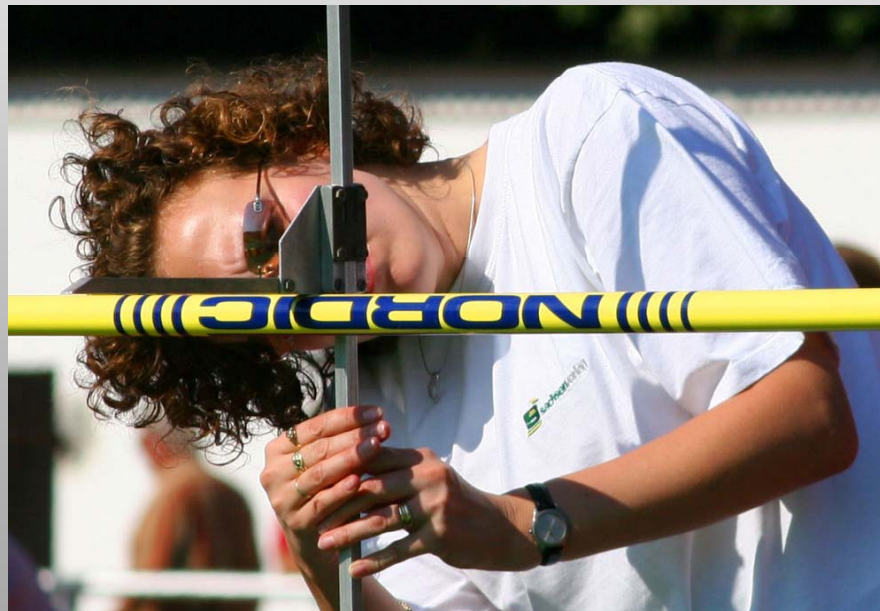
- This is what we believe
 - We are able to ensure best performance at the major competitions
 - We can peak performance by correct choice of training means and methods



The Periodisation Myth

- This is how it is

Study conducted in 2000



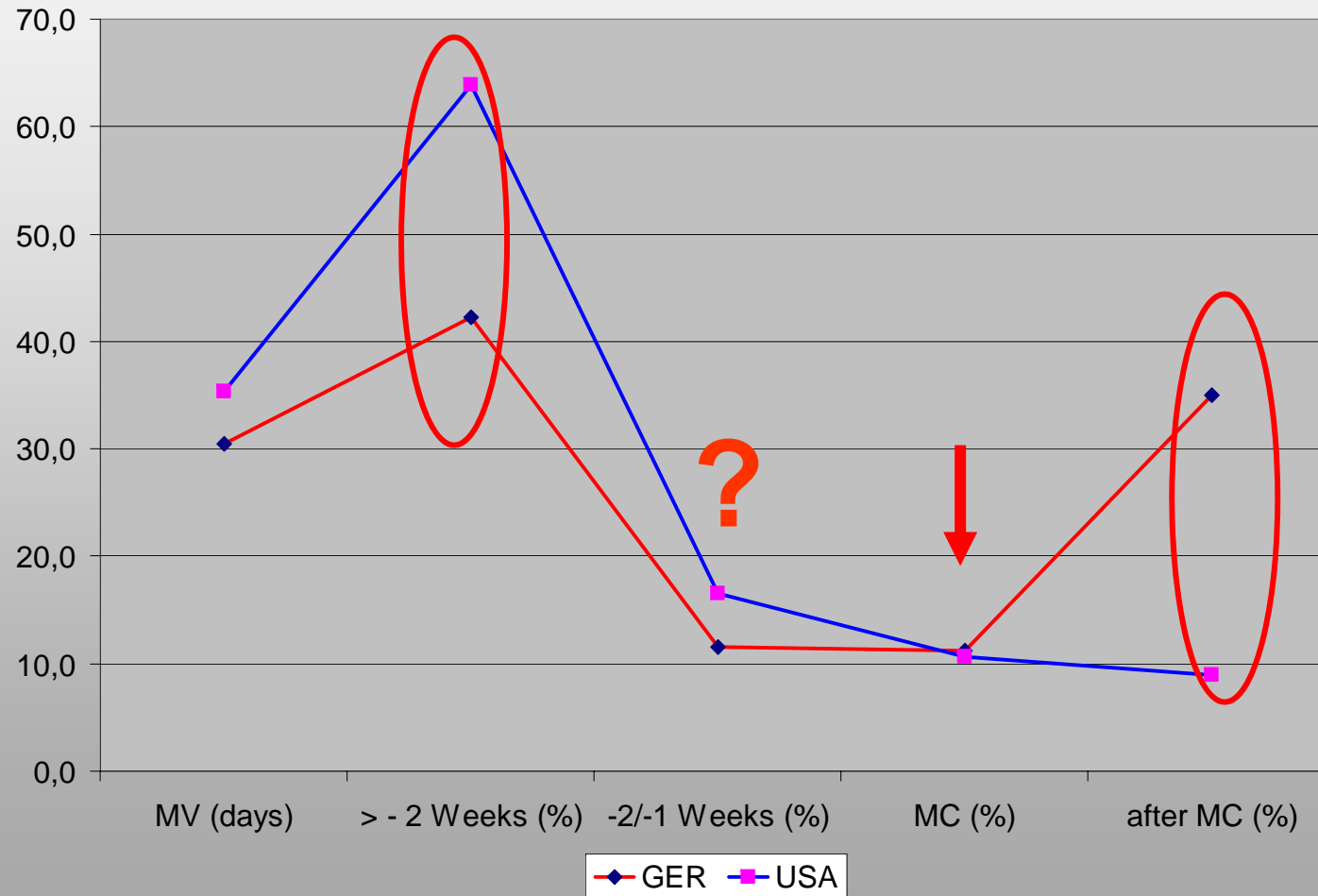
Database

- 3360 Athletes
- Best 20 in 14 events (not: middle/long distance)
USTAF and DLV
- Period of observation
 - 1996 (OG Atlanta)
 - 1997 (WC Athens)
 - 1999 (WC Seville)

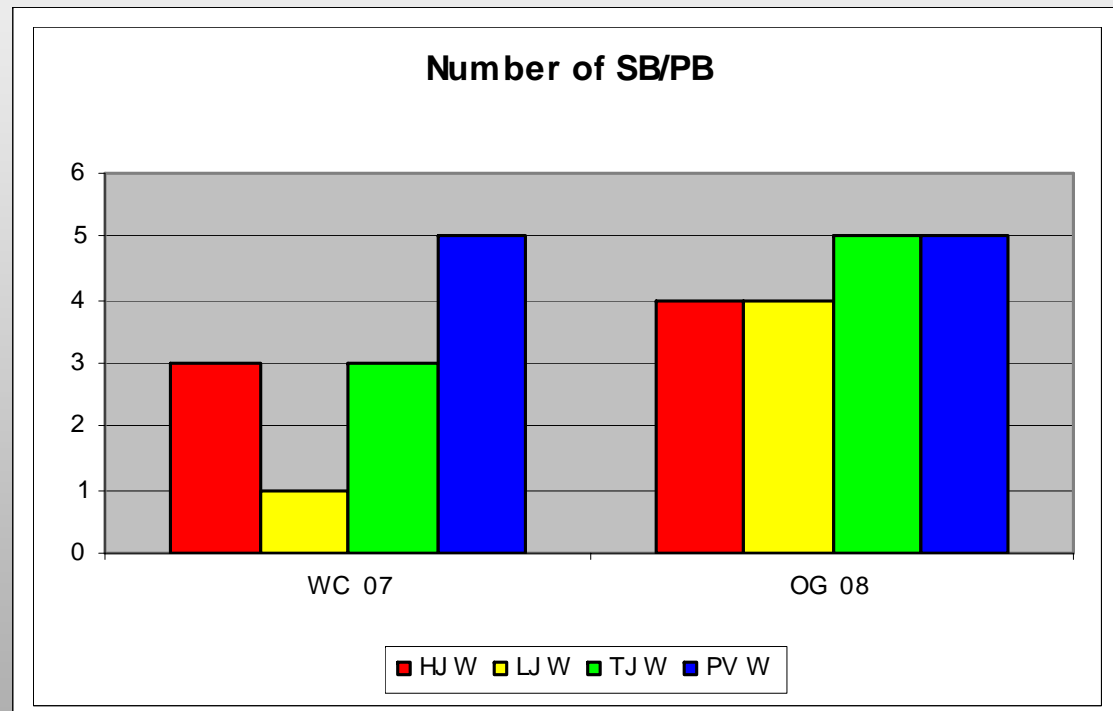


Findings

Average and timeline



Latest Findings



3 - The Volume Myth

- Volume is considered as one of the most important factors in training
- “I did 10 tons in weight training”
- “I did 200 hurdle jumps today”

What is the meaning of such statements?



Calculation of Load

- As volume and intensity are contradictory (the higher the volume the less the intensity and vice versa) you cannot calculate the load by just adding volume
- Example Weight lifting
 - 80%: 6 sets x 10 rep x 100kg = 6.000 kg
 - 95%: 6 sets x 2 rep x 130kg = 1.560 kg
- This is just the external load



Calculation of Load (2)

- More relevant is the internal load
- What does the external load mean for the various systems of the organism?
- In many situations it's the nervous system that counts
- Then “intensity” is the most important factor followed by “density”
- Resume: Calculation of load is different from adding volumes and needs some experience. There is no equation that gives a reasonable result.



Intensity vs Quality

- Intensity is different from quality.
- Intensity is a percentage of 100%
- Quality means a percentage of “perfect”



4 - The warm up myth

- This is how it is
 - 2 laps jogging
 - 10 minutes stretching
 - 10 minutes running drills
- Intention
 - Warm up muscles, soft tissues, nervous system etc.
 - Reduce risk of injury



4 - The warm up myth

- At 2nd glance
 - 2 laps jogging
 - Usually the speed is too slow and heart rate doesn't raise sufficiently
 - 10 minutes stretching
 - Muscles are still “cold” and stretching cannot be really efficient
 - 10 minutes running drills
 - Quite often it's just a routine without correction

Resume: A waste of 30 minutes every day



4 - The warm up myth

- Alternative
 - 10 minutes intensive work with a heart rate of about 150 bpm
 - Increasing intensity and range of motion
 - No breaks
 - Stretching is an own element of selected sessions
 - Running drills are supervised



5 - The “jumps off short approach” myth

Typical statement

- My athlete does 7.30 m from a short approach. It will be amazing what he will do from regular approach.
- But: quite often it's 7.40 m instead of the expected 7.80 m



Situation

- Jumps off a short approach are very popular in all jumping events
- Depending on the period and the level of performance they cover 70% or even more of technical training
- The result is quite often not satisfactory



Pro Arguments

- More repetitions
- Movement is slower
- More time to concentrate on details



Contra Arguments

- Basic change of take-off
- Basic change of time programme
- Improper reactive strength (plyometrics) pattern
- Adaptation of CNS to non-competitive situation



Rationale

- Run-up speed is missing
 - ➔ Kinetic energy is missing
 - ➔ Longer path of acceleration
 - ➔ Lowering of CM
 - ➔ Longer take-off time
 - ➔ Different use of free elements
 - ➔ Re-introducing speed causes a lot of problems



Consequences

- Reduce jumps off short approach
- Always remember the speed component
- Look for alternative drills apart from the pit/mat to work on technical details
- Permanently adapt to jumps off regular approach even in general preparation period



Coaching and the Coach



Coaching and the Coach - I

Coaches overestimate their influence

- “Over coaching” is one of the worst habits of coaches
 - The day before the major competition
 - During the competition
- It doesn't prove your competence that you are capable to identify 5 faults at a time
- It's a proof of competence that you give **one** relevant hint concerning the most important fault



Coaching and the Coach - II

- You always bring in your own personality
- You will always transport your mood, your hopes, your pressure, your anxieties, your ...
- The worst scenario is when athletes start competing "for you"

- Who coaches you?



Coaching and the Coach - III

- Following the well-known pathways is the most secure way
- To broaden the horizon sometimes needs new approaches
- To strike a new path always bears the risk of faults and failures
- Faults and failures must be accepted in order to achieve new goals



Coaching and the Coach - IV

Coach-Athlete interaction

- Respect / Acceptance
- Communication
- Confidence / Honesty
- List of commitments



Alternative Coaching Strategies



Statement

Michelangelo was asked the question how it was possible to make such a beautiful sculpture from a block of marble

His answer

“David has always been there. I just had to remove the redundant marble”.





The classical approach



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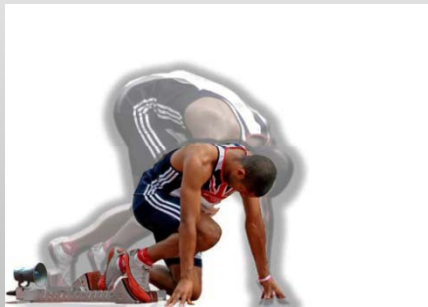
Potential

Training

Performance



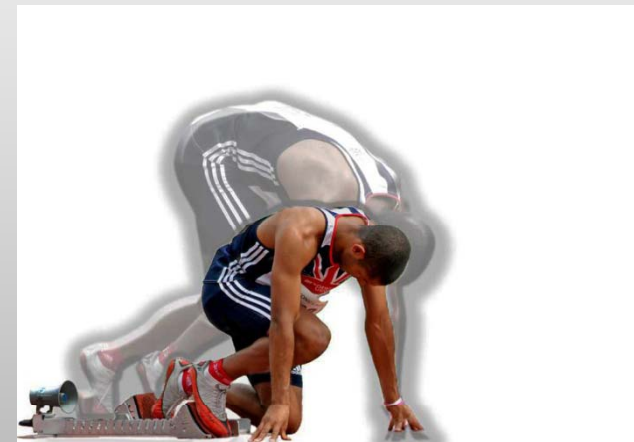
The alternative approach



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Potential

Interference

Performance



Consequences

- Coaching is athlete centered
 - Coaching is much more than teaching
 - Coach-Athlete interaction is essential
 - The "inner game"
-
- Coaching starts with the coach



Coaching is athlete centered

- Athletes are humans with all their hopes, anxieties, motivations, strengths and weaknesses
- You must start where you are not where you would like to be
- Always there is more than one way to success both technically and physically



Coaching and teaching

- Giving instructions, correcting performances, designing plans etc. are the classical duties
- Coaching is much more and the higher the level the more important are e.g.
 - Mentoring
 - Guidance
 - Interaction
 - Supporting life balance
 - I've got your back



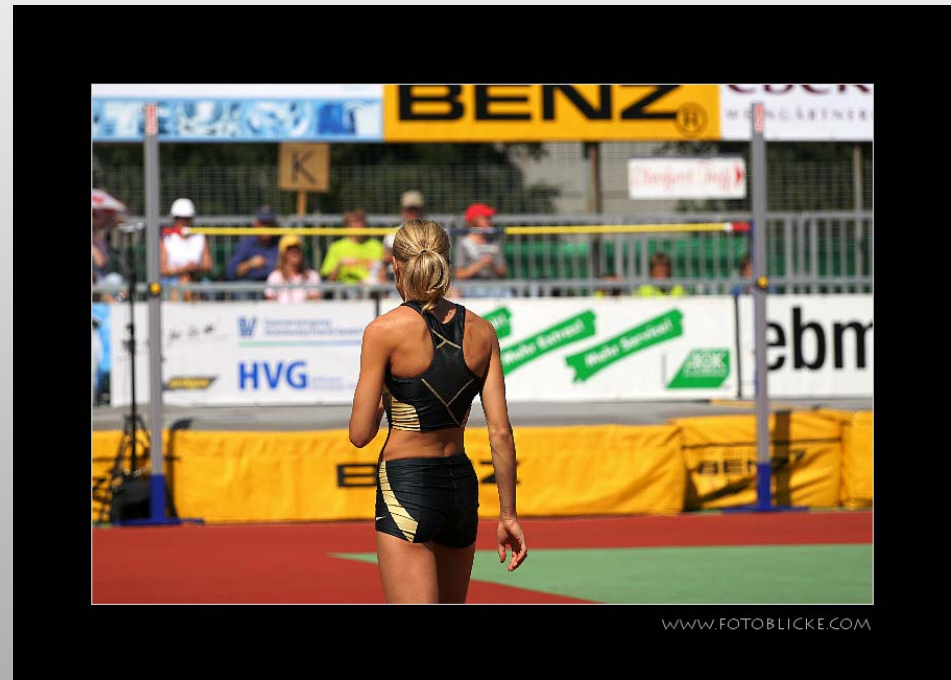
The "Inner Game"

- SELF INSTRUCTIONS
 - "Keep concentrated"
 - "Try harder"
 - "Remember the quick foot plant"
- Who is talking to whom?



The Two Egos

- Ego 1: The conscious part
 - Looks for control
 - Doesn't trust Ego 2
 - Permanently interferes with judges, comments and instructions
- Ego 2: The unconscious part
 - Is permanently struggling with Ego 1



The Flow

- Golfers, when in the game, imagine the flight of the ball and where it lands
- They don't instruct their muscles with details
- They trust their body to make it

- Athletes from all sports report that the really perfect jump, throw, shot etc. is “easy going”, “without effort”, “it just happened”.



Practical implications

- Example
 - To make a top performance in the sprint hurdles the hurdle unit time must be 1.02 sec
 - Your athlete is at 1.05 sec
 - What to do?



Practical implications

- Strategy 1
 - Work on technical details; give instructions; repeat and repeat the drills; believe that technical improvement will shorten the hurdle unit time
- Strategy 2
 - Reduce the height and/or distance of the hurdles till your athlete makes 1.02 sec
 - Slightly increase height and or distance always having the time in mind
 - Continue till you arrive at original heights/distances



Resume

- Trust your body
- Don't interfere too much
- Working with images and sensations quite often is more promising than working with verbal instructions on technical details



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