

**NORTH AMERICA, CENTRAL AMERICA AND CARIBBEAN
TRACK & FIELD COACHES ASSOCIATION**

NACACTFCA BULLETIN Vol. 6 Number 2 - Oct. 2008



**NACACTFCA
BOARD OF DIRECTORS**

President

Victor López
Puerto Rico

Vice-Presidents

Wendell Prince
Netherland Antilles

Irma Corral
México

Secretary

Richie Mercado
United States

Members At-Large

Glen Albertina
Netherland Antilles

Clive Walters
Jamaica

Les Gramantik
Canada

Yamil Justiniano
Puerto Rico

18th NACACTFCA Congress in Aruba



Congress Speakers (l-r) William Wuyke, Dennis Shaver, Wolfgang Ritzdorf, and Nelio Moura

Summary and articles begin on page 2 and will appear in subsequent bulletins!

IAAF Coaching Congress at 2009 World Championships in Berlin

IAAF is planning a coaching congress to be held in Berlin for 1-2 days following the conclusion of competition at the 2009 World Championships. The congress will represent all IAAF regions, including NACAC, and more information will be presented regarding specific location, schedule, format, and if and how coaches can attend.

Regional Calendar Information:

Go to CAC and NACAC sites for regional competition calendars:

<http://www.athlecac.org> and
<http://www.nacac.sportcentric.com/>

IAAF CECS Information:

Go to www.iaaf.org for schedules of upcoming schools in the NACAC region and information on the IAAF ACADEMY may be found at www.iaafacademy.com

In This Issue:

- 2009 IAAF Coaching Congress at Berlin World Championships
- 2008 NACACTFCA Congress in Aruba

Articles:

- The Art of Coaching in the 21st Century, Dr. Wolfgang Ritzdorf (GER)
- Coaching Horizontal Jumps in the 21st Century, Nelio Moura (BRA)





Published quarterly
by

North America,
Central America and
Caribbean Track &
Field Coaches
Association

Editor
Richie Mercado

rmercado@sis.org

NACACTFCA Office:
PO Box 4770
Carolina, Puerto
Rico 00984-4770

Office phone:
(787) 762-5400

FAX: (787) 253-2982

President
Victor Lopez

Home phone:
(787) 791-7032

Cellular:
(787) 367-1421

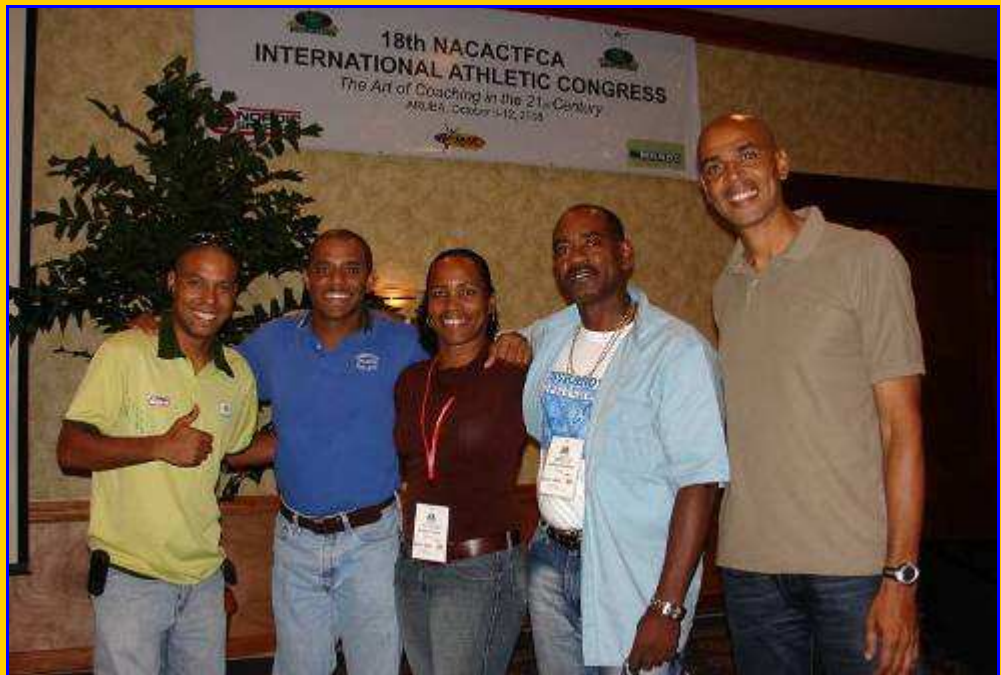
Email:
victorlp8@aol.com

Website:
www.nacactfca.org

Correspondence and
contributions to:
Richie Mercado
rmercado@sis.org

18th NACACTFCA CONGRESS in ARUBA

The 18th Congress was held October 9-12, 2008 at the Holiday Inn SunSpree Resort on the beautiful island of Aruba. It was a grand success!



William Wuyke (2nd from left) and Nelio Moura (right) with Congress participants in Aruba.

The proceedings of the 18th Congress are available for download at www.nacactfca.org, and summaries and reprints will appear in this and future issues of the NACACTFCA Electronic Technical Bulletin.



President Victor Lopez (PUR), Secretary Richie Mercado (USA), and Wolfgang Ritzdorf (GER)



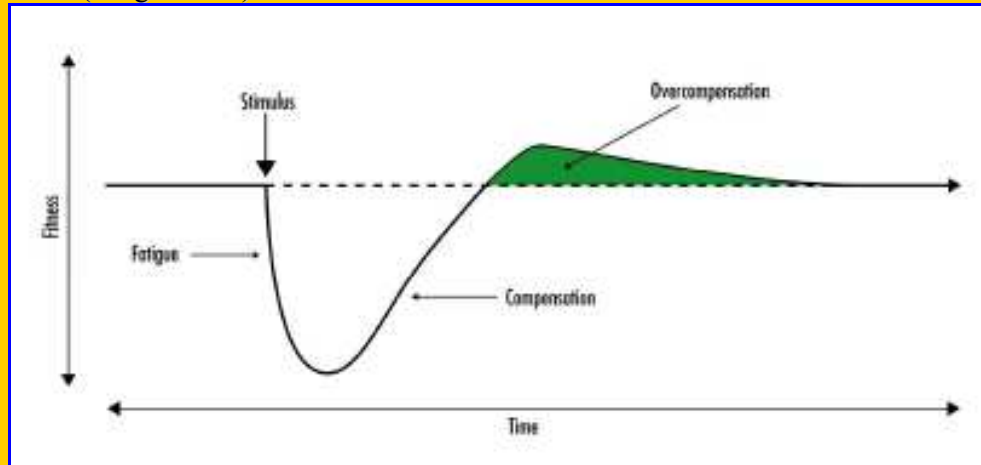
The Art of Coaching in the 21st Century – Dr. Wolfgang Ritzdorf (GER)

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

Some Myths of training

1 - The Overcompensation Myth

This is what we believe (image below)



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

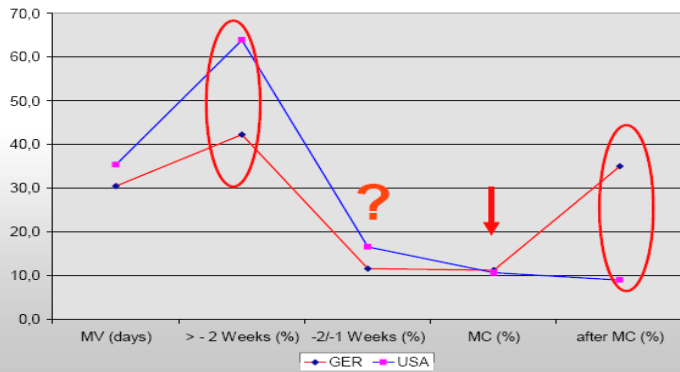
- This is how it is - Study conducted in 2000

Database

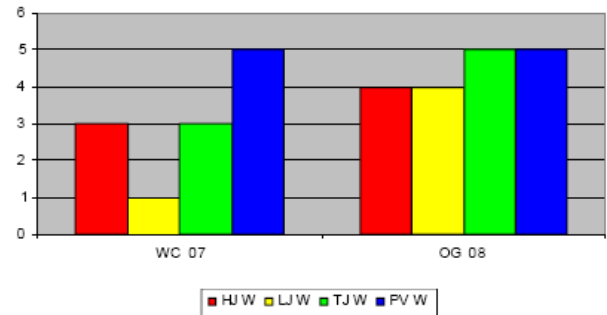
- 3360 Athletes
- Best 20 in 14 events (not: middle/long distance) USTAF and DLV
- Period of observation
 - 1996 (OG Atlanta) / 1997 (WC Athens) / 1999 (WC Seville)(graph of Findings on next page)



Average and timeline



Number of SB/PB



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”
- **CONCLUSION:** 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

CONCLUSION: 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 - I

- “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 our 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

- Respect / Acceptance
- Communication
- Confidence / Honesty
- List of commitments [both athlete and coach]

Alternative Coaching Strategies Statement

Michelangelo was asked: how it was possible to make such a beautiful sculpture form a block of marble?
His answer: “David has always been there. I just had to remove the redundant marble.”

The classical approach: Potential + Training = Performance

The alternative approach: Potential – Interference = Performance [We Need Both!]

- Coaching is athlete centered
- Coaching is much more than teaching
- Coach-Athlete interaction is essential
- The "inner game" [Gallway]
- 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"

- [too many] 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 judgments, 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

Summary

- 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

Dr. Ritzdorf can be reached by email at: ritzdorf@dshs-koeln.de / www.worldhighjumpcentre.de



The Art of Coaching in the 21st Century - Horizontal Jumps

Nelio Alfano Moura • Brazilian Athletics Federation • IAAF HPTC – São Paulo
(Coach of both Long Jump gold medalists at the 2008 Olympics – Irving Saladino and Mauren Maggi)

The subject chosen for the 2008 NACACTFCA Congress is opportune. We live a time of intense scientific and technological development, and the trend is to see acceleration in the production of knowledge and development of tools to be used by coaches and other sport professionals. The costs of systems and equipments are falling, and nowadays it is possible to have a physiology or biomechanics personal laboratory that can be transported in a backpack. I always give as example the MuscleLab™, an almost complete solution for strength and power evaluation, training prescription and training control.

Coaches who want to be successful in the highest level can't stay away from these new technologies. However, it is important to remind that they are only TOOLS to be used in a smart way, not the focus of the attention. As also happens in educational environments, the ACTIVITY is the most important component of sports training. Successful coaches have personal abilities that surpass the availability of technological resources and their capacity to use them. These attributes as a whole have been named "Art of Coaching".

At this presentation, I will try to show a few technological resources I have been using to prepare jumpers in Brazil, the way I interpret and use scientific knowledge to help them to develop, problems I have faced trying to apply this knowledge, and some creative ways (art??) I have used trying to solve them.

A few aspects should be highlighted in advance:

Talent Identification

This is obvious: the first step to develop an elite athlete is to discover him or her! Brazil has a population of 187 million inhabitants, with a small prevalence of women. Around 23% of them are teenagers, something like 43 million people (Source: <http://www.ibge.com.br>). There is no consensus about minimal values to be achieved in motor tests in order to qualify a young person as a sport talent. Ljach, apud Hohmann e Seidel (2003) affirms that the old GDR and USSR used as minimum requirement 2 *sd* above the mean in field tests to select children for their system of sports talent's promotion. That means 2,3% of the teenagers. In Brazil, using the same norm, we can consider the existence of 989.000 teenagers with potential to each group of events! How to identify them, and how to attract them to the track, is our first and most important challenge.

Talent Development

Once identified and properly selected, it is time to begin a long term program of development for these athletes. Good initial values are important, but we also need to identify those with good trainability, another characteristic of sport talents. Both aspects are determined at least 50% by genetics, validating the need of a program of talent identification: systematic practice, perseverance and opportunity are not enough. To offer programs that are adequate from the physiological, social and emotional points of view, and meaningful and motivating enough to keep the kids involved with the sport for many years is our second big challenge.

High Performance Training

Only after successfully complete the previous phases we can talk about a program aiming elite results. Even though we didn't solve our first two big challenges, a few athletes reach this phase, and have been developed appropriately. At this point, it is important to consider the big tendencies of the contemporary theory of sports training. In every case science, technology and the "Art of Coaching" are present:

- Planning and Training Monitoring
- Individualization
- Specificity
- Interdisciplinary Approach

Nelio Moura can be reached by email at: mmatletismo@uol.com.br

