


The 22nd North America, Central America and Caribbean Track and Field Coaches Association Congress

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Nassau, Bahamas

Eighty-three coaches and experts turned out for the 22nd Congress of the North America, Central America, and Caribbean Track & Field Coaches' Association (NACACTFCA) in Nassau, Bahamas, 4-7 October, 2012.

Honouring the Congress with their participation in the Opening Ceremony were Bahamian personalities Daniel Johnson, the Minister of Sport and Culture, Mike Sands, Bahamas Association of Athletics Associations (BAAA) President, and the legendary sprinter Pauline Davis-Thompson, who is now an IAAF Council member and a member of the IAAF Coaches' Commission. Also in attendance was long-time NACACTFCA supporter Neville McCook, the North America, Central America and Caribbean Athletics Association President, who, sadly, has since passed away.

World-class sprints and jumps coach Frans Bosch (NED), was the Congress keynote speaker and the line-up of distinguished presenters included Orlando Meneses (MEX), Bradley Cooper (BAH), Peter Thompson (GBR), Jim Denison (USA), and Wolfgang Ritzdorf (GER). The main theme for the Congress was "New Frontiers in Athletics Training" and the common threads that recurred regularly throughout the various presentations included 1) the need to simplify cues and teaching models to improve athlete understanding, 2) development of athlete autonomy, responsibility and control in both training and competition and 3) the notion that the role of the coach is not

necessarily to teach technique and competitive skills, but to enable the athlete to develop and own those themselves!

The following sections give highlights from the main presentations.

Positive Running

Frans Bosch (NED)

Addressing high velocity running, Bosch who now works as a performance consultant and is noted for his book "Running, Biomechanics and Exercise Physiology Applied in Practice", which he co-authored with Ronald Klomp, provided an excellent presentation of the need to re-examine how we think about sprinting.

His main point was that maximum strength is not the limiting factor in running velocity – there is plenty of force available - but the right force is needed in a short time and in the proper direction. "Strength training", he said, "is not the holy grail!" He focused instead on ground reaction forces and his "whip from the hip" concept, which means pushing the foot into the ground on contact. The simultaneous hip, knee, and ankle extension applies force to the ground earlier in the stance, using the rectus femoris before the hamstring. Although there is a need for specific strength development of the pertinent muscular systems, traditional power training through Olympic lifts introduces too much muscle slack and is probably not very effective for speed / power training unless the movement is modified to remove the counter movement and slack. Indeed, the counter-

movement causes slack in many exercises, including jumps and hops, and thus should be avoided in specific strength and power training.

Bosch talked at length about “Positive Running,” where pelvic posture, big pendulum vs. small pendulum, forward hip rotation at toe-off, reduced scissors action, casting the foot in front of the hip, and “the most difficult moment in the running cycle - reversing the pendulum” - are all important. Positive running helps muscles and tendons work in the optimum length. He stressed that the knee should *not* travel behind the pelvis and that athletes need to keep the free hip higher than the hip on the stance side – an excellent cue to watch. At toe-off, the stance shoulder is lower and the free hip should be higher. Overhead stick and jump rope and dumbbell runs can help athletes organise their own system to develop this.

He also noted that control of anterior-posterior pelvic rotation is crucial for hamstring function. At high velocities, large quantities of energy are transported from one leg to the other leg by elastic stretch as many as 4-5 times per second. A functional hamstring wants to stop knee extension and wants to assist hip extension and the isometric condition in the hamstring is controlled by pelvic rotation in the sagittal plane. In addition, at higher velocities there is less vertical oscillation and shorter ground contact. More force is produced in a shorter time, and this goes hand in hand with the pelvic rotation and hamstring function. He said the iliopsoas is crucial in hamstring loading - there is no such thing as an overactive iliopsoas. He recommends training the hamstrings with maximum strength exercises in the lengthened state – prone trunk raises with weights are done with the single leg.

Development of the Hurdles

Orlando Meneses (MEX)

Meneses, originally from Cuba, has been living in Mexico where he has successfully developed hurdlers at various levels. He was gracious enough to fill in for the Cuban hurdle

coach Santiago Antunez, who was unable to make the Congress at the last minute, and used his presentation described the training and technical considerations he applies with his athletes. He provided a solid overview of the methodology of periodised training, pedagogy of teaching and motor learning, and teaching progressions for the hurdles at different stages of development.

Strength, Flexibility, and Balance: Discus Specifics Made Easy

Bradley Cooper (BAH)

Cooper, a former NCAA Champion at Florida State University and the national record holder in the discus who works with athletes of all levels in his native Bahamas, explained his general approach to training discus throwers.

Starting with the point that technical skill plus physical capability equals the basic performance, he said he uses a multi-lateral programme with various methods including sprints, jumps, and throws and circuit training for developing speed, strength, and coordination. Weight room exercises like cleans and bench press are not over-emphasised at the expense of the special strength exercises of throwing different weight discs and other weighted implements such as balls, puds, and plates. Some of the testing he uses includes the Max Jones Quadathlon, a 60m speed test, and the vertical jump.

Technical development is centred on balance drills, phantom or ghost drills, and South African and full throws. Balance and rhythm are the essential principles of the throw, and Cooper emphasises low to high, slow to fast, and hips before arms with young throwers.

He concluded by discussing tactical development and mental training for big competitions based on his own experiences as well as those of his athletes.

Designing More Effective Training Sessions

Peter Thompson (USA)

Previously the Senior Education Manager in the IAAF Member Services Department, Thompson is now based in Oregon, USA. His presentation covered his programme of New Interval Training for middle and long distance runners and how its inclusion can result in more effective sessions, even for sprinters and hurdlers and jumpers.

He outlined the historical development of interval training, noting that many coaches and athletes still confuse repetition training with interval training – interval training may use repetitions, but repetition running is not in and of itself interval training! He referred to the research of Brooks in 1988, which dispelled the “lactic acid” myth and promoted the idea that oxidation of lactate is an important energy source during high-level running! He explained lactate dynamics training (LTD), which promotes utilisation and clearance of lactate so that it is optimally used around the body, and is accomplished by use of varied running rhythms so that lactate is alternately increased and reduced, with *fartlek* as the classic example.

Thompson said that in interval training, the training effect is in the interval. His programme is a form of LTD where the athlete runs a “roll on recovery” to develop a “synergistic relationship between the aerobic and lactate systems,” while “improving awareness for running rhythms and paces.” The “roll on recovery” as a principle and a skill is supported with science, analogous evidence, and case studies involving his own runners and those of coaches who have utilised the programme.

He presented methods of introducing and utilising his New Interval Training in any programme, and noted that with time the system can develop and become more detailed as the athletes develop a feel for the rhythms and using the roll on recoveries. Finally, he pointed out that through this programme, athletes de-

velop a responsibility for their own rhythms and recoveries, leading to greater ownership of their own training.

Positive Coaching: Ethical Planning for Athletics

Jim Denison (USA)

Dr Denison is an Associate Professor in the Faculty of Physical Education and Recreation at the University of Alberta and the Director of the Canadian Athletics Coaching Centre in Edmonton, Canada. In his presentation he discussed coaching ethics and developing autonomy in athletes through training and competition.

Beginning with the notion that while “ethics” in coaching usually invokes thoughts of doping or inappropriate relationships with athletes, he pointed out that it is in fact a larger issue when put into the framework of doing what is for the long-term good of the athlete and person. He detailed the traditional approach to coaching, planning, control of space, time, and movement, summarising that the usual goal is that every aspect of training is measured and supervised, maximum efficiency in use of time and space is the aim, and “each stage of development is subject to meticulous control and intervention.

“The question,” he asked, “is what do we do with Foucault’s analysis that 18 studies show that too much coaching control and not enough athlete ownership creates problems? Can athletic coaches reduce the disciplining and docile-making effects of their training plans by the way they organise various spatial, temporal, and movement elements?”

After giving some examples of situations involving coaching ethics and some suggestions for ways to include athletes in the process, Denison opened up to questions from the audience. The discussion included what it means to be “coachable” – does this mean a docile, robotic athlete who is dependent and often lacks the individual will to compete for him or herself? The notion that athletes are a problem

if they question and do not blindly follow everything the coach throws at them comes under the microscope when we think about the athlete's role in the whole process! He challenged the audience to consider if coaches "are teaching athletes to be independent and even allowing them to question and take the initiative to ask for more or question why things are not done differently?"

Analysis of the Jumping Events: Summer Olympics 2012

Wolfgang Ritzdorf (GER)

A lecturer at the German Sport University and General Manager of the IAAF World High Jump Centre in Cologne, Germany, Dr Ritzdorf used his presentation to review the jumping events at the recent Olympic Games in London and evaluate performances.

He started by detailing the poor performances in most of the preliminary rounds, the especially poor results in the men's high jump and women's vault finals and the good results in the men's pole vault and women's high jump finals. Comparisons were made with personal bests, season bests, and national records in the finals of each event. He noted that the Olympics were far from the best result for most athletes, with less than 10% achieving a season best in London.

After highlighting the individual disasters of top athletes in Olympic Games and World Championship results from 1996 to the present, Ritzdorf questioned why - given the improved resources, money, tracks, equipment, knowledge, technology, etc of today - jumpers are not at the general performance levels of the late 1980s and early 1990s, acknowledging that the less controlled doping of that era was a factor.



His suggestions for improving the situation included federations and other organisation providing more support and encouragement of athletics in society at all levels. But, he said, the main burden may need to be on coaches and their role in the preparation and empowerment of the athlete over the long term. This would include better understanding and individualisation of volume, intensity and density in training, making the “technical model” fit the athlete, and better physical and psychological preparation for competition. He then offered practical ideas in each of these areas.

Additional Points

The NACACTFCA would like to thank our sponsor, Nordic Sport CEO Dennis Österberg, who was present for the Congress and treated the lecturers and members of the NACACTFCA board to his annual appreciation dinner.

Special thanks to Dianne Woodside and the Bahamian Coaches Association for their organisation and hospitality, and for putting on a great Congress and *Junkanoo!*

Finally, we take this opportunity to announce that 23rd NACACTFCA Congress will be held in Curaçao October 3-6, 2013. The theme will be “The Road to Rio: Trends and Preparation for the Next Olympiad.” Presenters will include Art Venegas (USA), Ismael Lopez (TRI), Joe Vigil (USA), and Wendell Prince (CUR). Go to www.nacactfca.org for more information, Technical Bulletins, and electronic articles of past presentations.

Reported by Richie Mercado

Richie Mercado is Secretary the NACACTFCA. He can be contacted at rmercado@sj.org.