The 2nd European Race Walking Conference



Leeds Metropolitan University, United Kingdom

"Performance and Development" was the theme for the 2nd European Race Walking Conference, which attracted 65 participants from Europe, USA, South Africa and New Zealand to the England Athletics National Centre for Race Walking at Leeds Metropolitan University from 2 to 4 November 2012.

The thorough and challenging programme featured an outstanding line-up of speakers and workshop leaders from both inside the race walking family and other areas of sport, including coaches, performance directors, medical personnel and successful athletes. They covered a range of important topics including specialisation, event investment, preparing for peak performance and career maintenance.

At the conclusion of the conference, the participants agreed on a revised version of the declaration made at the first European Race Walking Conference in 2010.

The conference, which was a part of the 2012 European Athletics Coaching Summit Series, received generous financial support from England Athletics, the Ron Pickering Memorial Fund and European Athletics. On 3 November, Headingley Stadium - the home of the Yorkshire County Cricket Club, the Leeds Rhinos Rugby League team and the Leeds Carnegie Rugby Union team – hosted the conference dinner attended by all the participants.

This report provides a brief overview of the main conference activities.

The Training of Ana Cabecinha -From age 11 to the London Olympics *Paulo Murta (POR)*

Murta is the Technical Coach for the Athletics Association of the Algarve in Portugal and has been part of the Athletic School at *Clube Oriental de Pechão* since 1978, working with around 30 young race walkers annually. He has coached different athletes at three Olympic Games and at London 2012 he had two athletes in the women's 20km, Ana Cabecinha (POR), who placed 9th in 1:27:46, and Sonata Milusauskaité (LTU), who was 15th in a national record 1:30:26.

He opened the conference with a very detailed presentation of the training and career of Cabecinha, whom he has coached since she was 11 years old, describing her development from her start in race walking in January 1996, through a bronze medal at 10km at the European Junior Championships in 2003 to being a member of Portugal's winning team at the 2012 IAAF World Race Walking Cup and her participation at London 2012. Table 1 shows the progression of her training. He touched on the issues of all-round athletic training of young athletes in the sampling phase of their development, e.g. about age 10-14, progressing to specialisation at about age 15-16 and the highly-focused activities of athletes invest in training for high performance.

Using the example of Cabecinha, he described the double periodisation of performance (Table 2) and gave specific examples of training sessions undertaken in the different training phases, the annual activity volumes of the various training modalities employed (Table 3); and a statistical evolution of her performances from 3000m to 20km (Table 4).

| Year (age group) | Training Frequency | Comments |
|---|-----------------------|--|
| 1 st & 2 nd sports year (U12) | 3 - 4 times per week | Training: the most varied possible |
| 3 rd & 4 th sports year (U14) | 4 - 5 times per week | Training: varied; more dedicated to RW; introduction to fartlek |
| 5 th sports year (U16 - 1 st year) | 4 - 5 times per week | Beginning of specialisation; introduce training with intensive / extensive modalities + fartlek |
| 6 th sports year (U16 – 2 nd year) | 5 - 6 times per week | Specialisation training with intensive / extensive modalities + fartlek; introduction to long distance training |
| 7 th & 8 th sports year (U18) | 6 - 9 times per week | Introduction to training twice-a-day (1 - 2 days per week); training with intensive / extensive modalities + fartlek; long distance training |
| 9 th until present 17 th season (Senior) | 9 - 13 times per week | Training twice-a-day; training with intensive / extensive modalities + fartlek; long distance training |

Table 1: Multi-year training development of Ana Cabecinha

Performance Management of the Olympic Triathlon Champion Alistair Brownlee

Malcolm Brown (GBR)

Brown was the Olympic Performance Manager for British Triathlon leading up to London 2012 and is a former Director of Sport at Leeds Metropolitan University. In his presentation he discussed the three-way interaction between coach, athlete and environment, using the example of the highly successful GBR training group, which includes Alistair Brownlee (2012 Olympic gold medallist), Jonny Brownlee (2012 Olympic bronze medallist), Non Stanford (2012 world U23 champion); Tom Bishop (2011 & 2012 world U23 bronze medallist); David Mc-Namee (2011 world U23 silver medallist).

He described how the training environment had been built over many years with a "low tech, low-cost" ethos. The support services developed to include coach, physiotherapist, conditioning specialist and nutritionist. There is no culture of entitlement and it is important that athletes "earn" additional services/competitions/ trips. The "fast track" philosophy from Junior to Senior was described along with the underlying principles of establishing sound biomechanics and skills and increased training loads between age groups, with age 18-21 seen as the critical threshold to world-class performance.

Training Preparation Training Training Training Intensity **Microcycle Examples** Period Period Activities Environment 4 - 5 x running sessions: Runnina: 3 - 4 x race walking race walking: General Low intensity Dirt road: sessions (medium general preparation 1 (aerobic work) and grass; road; volume); 3 x general physical (6 - 8 weeks) some volume beach physical fitness training fitness (2 x circuit or gym + 1 x training beach training) low and medium 5 - 6 x race walking intensity (aerobic Dirt road: Extensive Runnina: sessions (medium and work) and volume grass; road; fundamental race walking; one session long volume); (long duration beach general preparation 1 2 - 3 x running sessions; training); race physical 1 - 2 x general physical walking technique; (10 - 12 fitness fitness training (free gym fartlek training weeks) training exercises);1 - 2 x fartlek (intensive/ training extensive) Low. medium 4 - 6 x race walking and high intensity Runnina: sessions (medium and Dirt road: (aerobic and Intensive race walking; one session long volume); anaerobic work); grass; road; fundamental general 2 - 3 x running sessions; 1st macrocycle, beach (sea and volume (long preparation 1 physical 1 - 2 x general physical duration training); level and September to (6 weeks) fitness fitness training (free gym fartlek and interval altitude) May training exercises); 1 - 2 x fartlek training (intensive / training extensive) Low, medium 4 - 6 x race walking and high intensity (aerobic and Dirt road: sessions (medium and Pre – Race one medium volume anaerobic work): grass: road: competitive 1 walking; controlled volume beach (sea session); 2 - 3 x running (medium duration (6 weeks) running level and sessions; 1 - 2 x interval training); interval altitude) training (intensive / training (intensive / extensive) extensive) Low and medium 4 - 5 x race walking Dirt road; intensity (aerobic sessions (medium and Race grass; road; Competitive 1 and some anone medium volume walking; beach (sea (4 weeks) aerobic work); session); 2 - 3 x running level and running controlled volume sessions; 1 x interval altitude) (medium duration training (intensive) training); interval training (intensive) Running; race walking; Transition Dirt road; 2nd general Low intensity grass; road; macrocycle, physical (aerobic work) (2 to 3 weeks) beach June to major fitness championship training

Table 2: Double periodisation scheme of Ana Cabecinha

2nd macrocycle identical to 1st with fewer weeks (14 - 18 microcycles)

| Year (age group) | Walking Continuous (km) | Running Continuous (km) | Specific Training (km) | Technique (hours) | Strength (hours) | Flexibility (hours) | Competitions (km) | Totals (km) |
|---------------------|-------------------------------|-------------------------------|------------------------------|----------------------|---------------------|------------------------|----------------------|----------------|
| 2002 (U20) | 1220 | 805 | 170 | 28 | 19 | 90 | 182 | 2377 |
| 2003 (U20) | 1550 | 920 | 185 | 30 | 22 | 100 | 175 | 2830 |
| 2004 (U23) | 1750 | 1050 | 230 | 35 | 35 | 120 | 203 | 3233 |
| 2005 (U23) | 2200 | 1110 | 280 | 40 | 45 | 120 | 197 | 3787 |
| 2006 (U23) | 3000 | 1150 | 320 | 46 | 50 | 140 | 224 | 4694 |
| 2007 (Senior) | 2900 | 1050 | 275 | 50 | 45 | 150 | 185 | 4420 |
| 2008 (Senior) | 3050 | 1220 | 295 | 50 | 55 | 175 | 155 | 4720 |
| 2009 (Senior) | 2550 | 850 | 230 | 50 | 45 | 175 | 125 | 3755 |
| 2010 (Senior) | 3275 | 1290 | 345 | 50 | 60 | 175 | 198 | 5108 |
| 2011 (Senior) | 3075 | 1275 | 320 | 50 | 55 | 200 | 193 | 4863 |
| 2012 (Senior) | 3620 | 1380 | 385 | 50 | 70 | 200 | 134 | 5519 |

Table 3: Annual activity registry for Ana Cabecinha

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| Year | 3000m | 3km | 5000m | 5km | 10,000m | 10km | 20km | 20,000m |
|---------------|----------|----------|----------|-------|----------|-------|----------|------------|
| 2000 (U18) | 14:14.35 | 14:21.08 | 25:20.5 | 25:22 | 52:46.58 | 53:03 | | |
| 2001 (U18) | 14:54.91 | 14:41.3 | 24:35.19 | 25:27 | 51:00.81 | | | |
| 2002 (U20) | 14:03.56 | 14:15.67 | 24:43.93 | 24:49 | 48:57.61 | 49:32 | | |
| 2003 (U20) | 13:52.71 | 13:56.7 | 24:09.6 | 23:42 | 47:36.15 | 49:17 | | |
| 2004 (U23) | 13:46.55 | 13:30.8 | 22:25.57 | 23:44 | 44:33.75 | 47:57 | 01:37:39 | |
| 2005 (U23) | 13:04.66 | 12:42.80 | 22:24.52 | 22:18 | 44:25.36 | 46:08 | 01:34:13 | |
| 2006 (U23) | 12:48.75 | 13:11.3 | 21:48.4 | 21:54 | 44:19.12 | 44:58 | 01:31:02 | 01:34:13.5 |
| 2007 (Senior) | 12:51.87 | 12:58.98 | 22:30.0 | 21:51 | 45:23.1 | 45:34 | 01:32:46 | |
| 2008 (Senior) | | | 21:36.9 | 21:48 | 43:08.17 | 43:33 | 01:27:46 | 01:30:49.7 |
| 2009 (Senior) | 12:56.45 | 13:48.47 | 23:18.8 | 21:40 | | 45:46 | 01:33:05 | |
| 2010 (Senior) | 12:56.86 | | 21:41.3 | 21:31 | 43:29.51 | 43:17 | 01:31:14 | |
| 2011 (Senior) | 12:46.24 | 13:10.31 | 21:46.04 | 21:54 | 45:14.81 | 43:15 | 01:31:08 | |
| 2012 (Senior) | 12:34.00 | 12:31.86 | 21:41.75 | 21:21 | 43:37.91 | 43:31 | 01:28:03 | |

Vital to the process is group training, with athletes learning from older peers and the retention of an element of fun. Leeds, Yorkshire, was described as cold, wet and hilly, making for a tough training location yet this was the base for the programme rather than a "kinder" climatic region.

The programme coaches, Jack Maitland and Brown, are both experienced coaches and former athletes who share fundamental principles and values with little ego. They aim to empower athletes with an open and inclusive philosophy that encourages decision-making and autonomy. Education has priority and as coaches they retain a curiosity in improving performance and value cross sport experience.

According to Brown, the challenge in the year prior to the Games featured a lot of "noise" from "experts", "people", sponsors, UK Sport, the British Olympic Association and British Triathlon. His role as Olympic Performance Manager was to identify solutions for building the confidence of the athletes and making sure every last detail for the Games (triathlon course, venue, routes, hotel, rooms and staff) was rehearsed, which allowed the athletes and support team to embrace the challenge, remain calm and ultimately enjoy the experience!

Race Walking Development Initiatives in Finland

Marko Kivimaki (FIN)

Kivimaki who was the Finland's 2012 Olympic Race Walk Coach reflected on his work at the IAAF Training Centre in Kuortane, Finland, and a development programme called the Finnish Race Walking School (FRWS), which was intended to assist moving talented young race walkers to the Finnish junior and senior athletics teams. Devised in 2004 and started in 2005 with 15 athletes, age 15-22, it was the county's first step to building a support network bringing athletes and experts together.

With matched funding from Finnish Athletics each athlete contributed €500 per year, which bought four all-inclusive training camps (Wed-Sun). The camp activities included: blood lactate testing (utilising a 6 x 1000m test to produce a lactate curve and validated with a control test of 2 x 3 km, between thresholds) video analysis and physiotherapy screening to inform strength & conditioning training. These were delivered with sport science support from the Finnish Research Institute for Olympic Sports (KIHU).

He said that the FRWS had helped to build a knowledge base and had an impact mentally,



Marko Kivimaki (r) leads an outdoor training session

offering wider views on athlete development to everyone involved. From the coaching point of view, the FRWS increased the quality of coach interaction with greater sharing of ideas about race walking technique and training.

By the year 2008 all high-potential athletes were in a Finnish Athletics training group, negating the need for the FRWS. Development of young race walkers now occurs through Junior Team Finland using the same principles as the FRWS.

Biomechanics and the Rules of Race Walking

Brian Hanley (IRL)

Hanley, a biomechanist in the Carnegie Faculty at Leeds Metropolitan University, presented findings from a number of studies on world-class athletes (both in competition and laboratory-based) related to the effect of the race walking rules on technique. He explained that athletes with legs bent at the knee have a mechanical advantage over those who walk legally, and therefore strict enforcement of this aspect of Rule 230.1 is recommended.

The main biomechanical effect of the straightened leg is the redundancy of the stance leg in forward propulsion, with a consequent increase in the importance of the hip and ankle muscles. However, the knee's abnormal movement during stance means that elite race walkers are able to achieve great step lengths and speeds without visible loss of contact. To optimise these movements, elastic training of the key leg muscles is required as part of a race walker's strength and conditioning programme. Although very brief losses of contact are normal in race walking, athletes should always try to minimise these so that the risk of disqualification is reduced and faster, legal speeds are possible.

Hanley also described the weaknesses of proposals to use video or other external methods of measuring loss of contact and recommended the continued use of judges' independent observations ('to the human eye').

Interviews and Workshops

Ireland's Olive Loughnane, silver medallist in the women's 20km walk at the 2009 IAAF World Championships in Athletics, gave an indepth interview to Ian Richards. In it she reflected on the role of coaching in her career that spanned over a decade and half and included four Olympic Games.

Alison Rose (GBR) and Oli Williamson (GBR), Coach House Physiotherapy Clinic; and Andy Walling (GBR), Athlete Matters and Salomon Trail Running, led a workshop on functional movement screening for race walk athletes, including event specific examples from their practice with developing and international team race walkers.

Andrew Manley (GBR), Sport Psychologist, Carnegie Faculty, Leeds Metropolitan University, led a workshop on developing an understanding of each other's' roles in working with developing athletes. He provided examples of work conducted over the last two seasons with developing athletes (age 14-17); and discussed future directions for sport psychology support.



Alison Rose in her workshop on functional movement screening for race walkers

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Brian Hanley (IRL) led a workshop on injuries in race walking, focusing on the two most common injury sites: the shin and hamstrings (based on data collected at the 2012 IAAF World Race Walking Cup from 50 athletes).

Martin Rush (GBR) and Dave Rowland (GBR), England Athletics National Coach Mentors, presented a workshop on conditioning for race walking using technical examples from the 2012 Olympic Games. Martin also led a workshop for coaches on introducing the event to novice athletes and/or coaches of other disciplines that is being utilised by the England Athletics National Coach Mentor Programme.



England Athletics National Coach Mentors Martin Rush and Dave Rowland lead their workshop

Conference Declaration

The final plenary workshop closed the conference by revisiting and revising the declaration made at the first European Race Walking Conference in 2010. The new declaration (see box) was unanimously endorsed by all the participants.

Reported by Ian Richards and Andrew Drake

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Participants at the 2nd European Race Walking Conference

Conference Declaration 2012

- Race Walking as a discipline should be developed in parallel with wider developments in European and International athletics coach development programmes (e.g. the IAAF CECS) but with specific reference to the needs of race walk athletes and their coaches.
- Race Walking as a discipline should be developed by adopting the principles of Long Term Athlete Development (LTAD) and Long Term Coach Development (LTCD).
- The delegates confirm the value of periodic Race Walking coach interaction as well as interaction within the wider sphere of athletics.
- Race Walking as a discipline should be developed by adopting evidence based practice and models of good practice.
- In order for Race Walking as a discipline to develop further and flourish it should be explicitly and visibly embedded within the structures and programmes of athletics, internationally, nationally (e.g. as part of a physical education athletics curriculum) and at local levels.
- Race Walking as a discipline should be developed through opportunities for regular and appropriate international competition.
- Race Walking as a discipline should be developed through regular coaching conferences/seminars... These could be attached to European Athletics/ IAAF competitions but event development should also to explore the use of new technology e.g. webinars/podcasts.
- Race Walking as a discipline should be developed by: a) interaction between coaches, officials and athletes using an evidence based and athlete centred approach; and b) by a consistent application of the rules, achieved through consultation between coaches, officials and athletes
- The recruitment and retention of Race Walking athletes should be encouraged through the education of the media on the rules, regulations; and the technical, tactical, physical and mental challenge of race walking.

With thanks to Ian Whatley and Andrew Manley for support in wording the declaration.