

## The International Athletic Foundation Workshop on Youth Athletics

**I**n 1999, the IAAF took the first of two bold initiatives to provide services for target groups that it has traditionally left to its national federations and others. That year it added a biennial World Youth Championships in Athletics, for athletes aged 16 to 18 years old, to the sport's cycle of major championship events. Among the objectives for the meeting was the provision of a world stage for competitors who were younger than those taking part in the well established World Junior Championships in Athletics, in the hope that some could use it as the first rung on the ladder to success in the senior ranks.

The second initiative, called IAAF Kids Athletics, provided Member Federations with a pre-packaged programme of modified athletics activities and equipment for introducing large numbers of youngsters to the sport. It was envisaged that Kids Athletics would help to promote the sport to a new generation of participants (and future fans) and provide a useful tool for talent identification.

The first editions of the World Youth Championships rewarded the IAAF's boldness by proving successful from both the participation and competitive points of view as 131 countries in 1999 and 159 countries in 2001 sent teams and the young athletes responded with some impressive performances. Kids Athletics is still in the process of becoming established but there is no reason to presume that it will not be well received.

But being bold can sometimes create unforeseen effects. The organisers of the second edition of the World Youth Champi-

onships reported that a worryingly high percentage of the competitors required treatment for injuries and during the last three or four years "youth athletics" has become a hot topic for debate at the national and international levels. Among the issues to emerge are:

- ◆ The pros and cons of specialisation, performance-oriented training and international competition at an early age
- ◆ Appropriate age-groupings for training and competition
- ◆ The phenomenon of young athlete drop-out
- ◆ The training of coaches to best support the development of young athletes.

It is clear that having gone down this road the IAAF Council, Committees and Commissions must stay engaged with this area of the sport and be prepared to make adjustments when appropriate. In order to do this effectively there is a need to keep abreast of the latest research and thinking.

To this end, the International Athletic Foundation, with special support from the Real Federación Española de Atletismo (Royal Spanish Athletics Federation), hosted an international working group of nine experts from a range of fields associated with youth athletics in Madrid, Spain for two days of presentations and discussion 22-23 September 2002. The workshop was co-chaired by Amadeo Francis, IAAF Vice President and Development Commission Chairman, and Dr Harmon Brown, a member of the IAAF Medical Committee.

In his welcoming remarks Francis expressed his gratitude that such a distinguished group of experts in their fields could focus attention on the IAAF and its programmes. He said that he hoped they would make recommendations that would guide him and his colleagues and that the workshop would be the beginning of a permanent process of consultation on youth athletics.

The theme "children are not little adults" featured in many of the presentations, the message being that approaches and policies clearly different from those used with older athletes are required if the IAAF is to be successful in this new area of activity. Following the presentations, the working group discussed many of the issues raised and considered the implications for the IAAF and the sport. Consensus views and a series of recommendations in seven topic areas emerged and are given after the presentation summaries below.

## Presentation Summaries

### *Young Athletes: Growth, Maturation and Training Effects*

Robert Malina, Ph. D, Research Professor, Tarleton State University, Texas, USA

Malina, an anthropologist who specialises in child growth and nutrition, started by outlining the differences between growth, maturation and development. This was followed with an overview of the existing research and findings with regard to a) the growth and maturity status of young athletes, b) whether training for sport influences growth and maturation and c) the effect of training on potential growth disorders. The wide variations observed in children, not only in size, physique and body composition but also in the rates of growth and in the timing and tempo of biological maturation at any given age, were pointed out. Because of these, he said that there were problems with using chronological age as the sole guide in the

design and implementation of programmes for young athletes. Throughout the presentation Malina referred to the lack of data required to draw additional scientifically valid conclusions and the need for more research.

### *Unique Physiologic Characteristics of Young Athletes*

Oded Bar-Or, M.D., Professor of Pediatrics and Director of the Children's Exercise & Nutrition Centre, McMaster University, Ontario, Canada

While physiologic responses to exercise and training are similar in people of all ages, there are several age- and maturation-related differences in these responses. Bar-Or, whose own research in this area has led to more than 250 published articles, presented an overview of the current knowledge on some of the most important of these differences from the point of view of application to the training of young athletes. The differences covered were a) anaerobic vs. aerobic performance, b) energy cost of locomotion, c) recovery following exercise and d) thermoregulation in hot climates. He concluded by suggesting a general practical implication for each. Among these was the advice that child athletes could not be expected to perform well in anaerobic activities such as 200 and 400 metre races. Bar-Or also pointed out the need for further research focused specifically young athletes to confirm and develop his identified implications.

### *Long-term Athlete Development and Trainability During Childhood*

Istvan Balyi, Ph.D., Advanced Training & Performance, Victoria, BC, Canada

Central to Balyi's presentation was the concept of a long-term athlete development model (LTADM), which he illustrated with the quote that "it takes 10 years of extensive practice to excel in anything." He identified

the factors that contribute to successful sporting performances and the shortcomings or "gaps" in young performer development of various sports systems around the world. These include early specialisation of children in late-specialisation sports (including athletics), inappropriate training particularly during critical periods of growth and development, and inappropriate competition programmes. Among the reasons he cited for this situation were inadequate education of coaches, administrators and parents. He explained the phases of the LTADM, detailing the developmental rationale, programme objectives and coaching implications for each. He concluded by listing the key aspects of an athlete development programme plan based on the LTADM and giving examples of the implementation of such a programme that he has been involved with around the world.

#### *Dropout Factors in Young Athlete Programmes*

Gaby Bussmann, Ph. D., Sport Psychologist, Olympic Centre, Dortmund, Germany

Dropout from sport refers to cases where an active career is interrupted or stopped completely at an earlier stage than necessary and well before the individual would have been expected to reach his or her performance potential. Bussmann, herself an international level performer over 400 meters, drew on the relevant German research including her own work to identify eight factors that are likely to be cited by athletes leaving the sport as contributing to their decision. She discussed each factor in detail and drew conclusion to assist sport leaders in reducing drop-out. Emphasised within these was the central importance of pedagogical and psychological qualification of coaches so that they would be best prepared to consider all aspects of a young athlete's life (family, social, education, etc.) when planning the training and competition programme and be able to make useful interventions in the area of performance motivation.

#### *Strategies to Reduce Dropout from Youth Sport Programmes*

Suzie Tuffey Riewald, Ph. D., Associate Director of Coaching, U.S. Olympic Committee, Colorado, USA

Tuffey, a former national champion distance runner, began her presentation by saying that each year in the USA 35% of the participants in children's sports programmes withdraw. While some move to other sports, others drop out altogether. The research literature identifies reasons given by young athletes for dropout as well as their motivations for participation in sport. Of particular interest was "fun", which features high on both lists. In her own research into youth swimming, Tuffey delved more deeply into the concept. Among her conclusions were that fun has different meanings to children and adults and that what young athletes view as fun is so far reaching and encompasses so many aspects of the sports experience that it must be purposefully planned into an organised sport programme to maintain motivation for participation. She concluded by discussing eight strategies, most of a psycho-social nature, for reducing dropout from youth athletics programmes.

#### *Injury Problems at the 2nd IAAF World Youth Championships in Athletics*

Karoly Piko M.D., Medical Director for the 2nd IAAF World Youth Championships in Athletics, Debrecen, Hungary

Of the 1,032 participants in the 2nd IAAF World Youth Championships in Athletics, for competitors between the ages of 16 and 18 years old, at least 189 (18%) were treated for injuries or illness. Piko, who is a member of the IAAF Medical Committee, said that this unusually high level called for careful consideration of the possible causes and appropriate measures to improve the situation in future events. He revealed that the vast majority of the injuries were to the musculoskeletal systems primarily of athletes in the sprint, hurdle and jumping events. He

suggested that inappropriate preparation programmes (training and competition), long-distance travel without proper recovery and adaptation time, inexperienced coaches and taking part in too many events were contributing factors. Among his recommendations were mandatory health-screening examinations for all participants, better training of coaches and re-consideration of whether Area youth championships might be more appropriate than a world event.

*The Royal Spanish Athletic Federation Programme of Talent Identification, Development and Assistance for Young Athletes*

José García Grossocordón, Director of Junior and Youth Athletics, Royal Spanish Athletic Federation

During the build-up to the 1992 Olympic Games in Barcelona, the Royal Spanish Athletic Federation realised it needed to devise a progressive means of talent identification, selection, development and support if Spanish athletes were to be consistently competitive on the international stage. Grossocordón described the programme, initiated in 1989 with a large element of state support, including its structure, philosophy, and levels of assistance to athletes (and their coaches) in the various phases of their careers. He outlined conclusions reached on age limits, phases of development and activities within the programme and said that a key to success was the emphasis on all-round development of motor skills and athletic abilities for children up to the age of 14 - 15 before any specialist training was introduced. He concluded with a discussion of the success of the programme, which has served 88% of Spain's medallists in the last 20 major international competitions.

*Design and Implementation of Programmes to Attract, Recruit, Retain and Develop Young Athletes*

Lyle Sanderson, Associate Professor and Head Track and Field Coach, University of Saskatchewan, Canada

Sanderson, who has coached a number of national and international level champion athletes, started his presentation by reiterating that athletics is in competition with other sports for talented young athletes and that to survive it must attract large numbers of participants and keep them interested. However, early specialisation and over-ambitious competition programmes work against the achievement of top-level performances and long-term success, creating a conundrum for the sport. He said that strategies for the future of the sport must address entry-level programmes, the application of growth and development knowledge, the issue of fun and enjoyment, and competition programmes. He then focused on the roles of coaches, teachers and parents and the need to improve the education and information available to each group. He concluded with a number of recommendations, including that the IAAF should produce guidelines for appropriate competition events and training practices for each stage of an individual's development.

*21st Century Strategies for Attracting and Retaining Young Athletes*

Frank Dick, President European Athletics Coaches Association

After explaining that athletics is a business in both the commercial and technical sectors, Dick's wide-ranging and enthusiastic presentation revolved around seeing athletes as customers. Previously a successful Head Coach for British Athletics and a personal coach to world-class performers in several sports and now a management consultant, Dick said that the implication of this approach was that coaches and others involved with young athletes must think in terms of providing a high quality of service, being proactive in satisfying athlete needs and adding value to each athlete's experience in athletics. He pointed out the importance of dialogue with athletes to identify what they think their needs are and to communicate to them both how athletics is meeting those needs and why it is different

from other sports. He concluded by saying that there was no single solution to winning customers and challenging the sport to collect ideas, learn from experience and share to make its programmes more successful.

### Workshop proceedings

The International Athletic Foundation has published the complete presentations in a book entitled *The Future of Youth Athletics*, which is available from the IAAF Bureau in Monaco.

### Recommendations

1. The Working Group expresses its strong view that all activities of the IAAF and its Member Federations for athletes from childhood through young adulthood should be "athlete centred" in their design and implementation. It recommends the review, evaluation and amendment of existing activities with the aim of developing integrated administrative, competition, coaching and teaching programmes to best meet the needs of young athletes. It also recommends that the IAAF appoint an oversight group, including outside experts, to monitor this process. It further recommends that the process be initiated with the adoption of a "Young Athlete Bill of Rights", which would be endorsed by all IAAF Member Federations.
2. The Working Group expresses its strong reservations regarding the merits of world level championships for athletes under the age of 18. It urges the IAAF to re-consider the staging of the World Youth Championships in Athletics in favour of Area or Regional level championships. It also urges the IAAF to amend its rules to specify that the minimum age for participation in any IAAF Championship is 16 years old (i.e., that the athlete has reached his/her 16th birthday by the date of the competition) It further recommends that the IAAF lead a process of calendar rationalisation for those international competitions that may be

held for athletes under the age of 18 so that conflicts with Area and Regional level competitions may be avoided.

3. The Working Group expresses its view that in all international competitions that may be held for athletes under the age of 18 every effort must be made to ensure that participants are kept safe and healthy. It recommends that applicable rules be amended to ensure that in such competitions all participating athletes produce written parental consent to travel and compete, verification of age and a medical certificate of fitness to compete. It also recommends that careful attention be given to ensuring that all participants travelling to an event be accompanied by an appropriate adult chaperone. It further recommends that careful attention be given to ensuring that participants travelling to the event be given adequate time for adjustment prior to competition and that appropriate guidance be given to team leaders on preparation for journeys over long distances, so as to minimize the effects of 'jet-lag'.
4. The Working Group expresses its view that the IAAF can and should lead its Member Federations and other agencies in the process of development of athletics for young people. It recommends that the IAAF and its Member Federations facilitate the incorporation of basic track and field athletics movement skills in physical education programmes. It also recommends that the IAAF collect and analyses information on existing programmes for young people in athletics and other sports to identify examples of best practice. It further recommends that the IAAF uses this analysis to develop athletics programme structures and content suited to the following age groups:
  - 6 – 12 years
  - 13 – 15 years
  - 16 – 19 years
  - 20 – 25 years

5. The Working Group expresses its view that young athletes require different forms of competition than adults as well as events and implements with carefully considered specifications. It recommends that the IAAF encourage Area Associations and Member Federations to emphasise combined- and multi-event competitions, relays and team scoring events starting at local level for athletes under the age of 16. It also recommends that the IAAF conduct research that would lead to the confirmation or change of the specification of throwing implements used by athletes under the age of 20.
6. The Working Group expresses its belief that coaches who work with young athletes require special training, skills, and recognition. It strongly recommends that the IAAF and its Member Federations review their coaching education programmes to ensure that adequate emphasis is placed on the special needs of young athletes. It also recommends that the IAAF and its Member Federations develop appropriate means and content for communication with coaches and teachers who work with young athletes.
7. The Working Group expresses its belief that the IAAF should take the lead in promoting athletics to young people with the aim of increasing the number of participants and improving the retention of participants in the sport. It recommends that the IAAF and its Member Federations develop appropriate means and contents for communication with young athletes and their parents regarding a) the various benefits of taking part in athletics, b) the earning and career development potential for elite performers and c) models of behaviour and support by parents. It also recommends that more research be conducted on issues faced by elite performers, particularly those who leave the sport, with the aim of developing programmes to address any identified problems. It further recommends that the IAAF and its Member Federations develop appropriate means and content for communication with the parents of young athletes.

Reported by Bill Glad

