Chapter One – Literature Review

What is the LTAD model?

The LTAD approach was designed to help prepare sports players to reach elite levels in their sport, but is equally valid for a healthy lifelong participation in sport. “Sports can be generally classified as early specialisation or late specialisation sports”, (Balyi & Hamilton, 2004). Examples of early specialisation sports are swimming, gymnastics and figure skating that require early sport specific training. Late specialisation sports such as racquet sports, all team sports, track and field all need a more general approach to training. The early specialisation sport model consists of four phases; Training to Train, Training to Compete, Training to Win and Retire / Retainment. The late specialisation sport model has two additional phases at the beginning, the FUNdamental stage and Learning to Train stage. It emerges from the research that Balyi focuses mainly on the late specialisation model and believes early specialisation sports lead to early retirement and burnout, (Balyi, 1999). He suggests that early specialisation sports should develop their own sport-specific model and may try to add, combine or amalgamate the two extra stages from the late specialisation model, (Balyi & Hamilton, 2004).

The FUNdamental stage comes first in the late specialisation model with males ageing 6-9 and females 6-8 years old. The objectives for this stage are to, “learn all fundamental movement skills (build overall motor skills)”, (Balyi & Hamilton, 2004, Pg 2). “Fundamental Movement Skills (FMS) are movement patterns that involve different parts such as the legs, arms, trunk and head and include such skills as running, hopping, catching, throwing, striking and balancing,” and act as a foundation
round,” (Balyi, 1998). The training to compete requires a double periodisation cycle. The two cycles may differ in duration according to whether the chosen sport falls during the summer or winter season. The length would be longer e.g. for Gaelic football during the summer season. The intensity, volume and specific training may increase or decrease during the cycles. There may be smaller periods within these cycles – microcycles that may focus on a particular element of the sport e.g. increased fitness at the beginning of a summer season. The athletes will be required to spend three to five more years before entering the training to win stage, (Balyi, 1998).

The Training to Win stage is for males 18+ and females 17+ yrs old who will aim to, “maximize fitness preparation and sport, individual and position specific skills as well as performance”, (Balyi & Hamilton, 2004, Pg. 4). At the athletes main focus is now on maximising performance the training to competition ratio shifts to 25:75. This phase uses multiple periods with high intensity and volume of training all year round, (Balyi & Hamilton, 1999). The athlete and coach have to plan the training programmes according to when the athlete should be producing their best performances i.e. in competition. Balyi & Hamilton trust that athletes can compete all year round using multiple periodisation to strategically select competitions to meet the individual’s needs, (1999). For example, a cross-country runner could select the distance, environment and standard of competition best suited to them. Each individual athlete has a limit they can reach in sport, the further away the more improvements they can make Balyi & Hamilton refer to this as the ‘ceiling limit,’ (1999).

Following on from the athlete Training to Win is the Retirement /Retainment stage. The athlete is retired permanently from all competition, (Balyi & Hamilton, 2004). All ex-athletes are encouraged to detrain from their sport and to take part in other
Chapter Four – Analysis and Discussion

Discussion

From the research conducted, trends were found throughout the sports, which would indicate an overall standing of sport’s governing bodies in Northern Ireland. Results found that 100% of the governing bodies researched expressed:

- The need for athlete development to start at primary school age or earlier, which reflects the want for more Physical Education specialists in primary schools.
- The questionnaires indicated a great interest from all five sports in the Long Term Athlete Development model with the IRFU, RYA NI and Cyclist Ireland having already published literature on the topic, with the others in the process of drawing up a publication for future development. However results also showed that more emphasis needs to be given on how exactly this can be achieved.
- All the sports researched, wished to change their competition structure so that it better reflects LTAD.
- Also there seems to be a need for a change in the coaching structure, in terms of getting more coaches at all levels of development, who are well trained.

FUNdamentals in Primary schools

The main focus of the interviews conducted was how the children of primary school ages were being coached. There is a firm belief that if coaching is performed properly
participation and the better players. This idea of the more elite athletes playing with each other can improve the end product of a young rugby player, as good players will learn off good players. However for elite athletes a new pathway has to be designed as the current pathway has a huge number of dropouts. Sagar et al (2004) describes how the fear of failure causes dropouts in young elite athletes and this needs to be stopped. Both Cycling NI and RYA NI openly admitted, from the results, that they have poor competition structures. However with a proper plan put in place they could fully implement LTAD and have their competition structure geared toward the development of their athletes.

Coaching structure

The main reason for the problems, which the governing bodies are finding with their coaching structure, is that they don’t reflect LTAD. All five sets of results showed some need for change. The LTAD model requires a number of changes in the system i.e. schools, clubs, coaching, training etc. Balyi (1999) said that, “change is inevitable – progress is optional!”

The majority of problems within sport development were answered in Balyi’s LTAD model i.e. physical literacy, competition and participation, coaching, pathways and long-term player/athlete development, inclusion, sports science and medical support, (ISC et al, 2003). This includes coaching, so by implementing LTAD they should find improvements.

At present England has seen a massive development of Sport Academies within further education having a special link with the governing bodies, who are now reaping the rewards of having young volunteers with coaching and officiating


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<th>Question</th>
<th>Answer</th>
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<td>10. Have you experienced any difficulties in implementing the model or putting a draft together?</td>
<td>Yes. Mainly ignorance to the theory</td>
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<td>11. What resources does your sport devote to the long term development of athletes?</td>
<td>Little, although we do tie in with sportni to direct are talented athletes in SINI programmes.</td>
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<td>12a. Please would you describe your coaching structure?</td>
<td>Weak. Currently we have a foundation and level 1 performance coaching courses. We are currently developing level 2. We are also developing a leader/instructor qualification for mountain biking. Eventually we hope to build a horizontal coaching ladder for participation i.e. level 2/3 child centred coaches</td>
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<td>b. Does your coaching structure reflect LTAD, and if not what changes do you plan to make?</td>
<td></td>
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<td>13a. What is your competition structure like at present?</td>
<td>No. as above</td>
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<tr>
<td>b. Does your competition structure reflect LTAD, and if not what changes do you plan to make?</td>
<td></td>
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<td>14. Do you see any future changes within the competition structure?</td>
<td>Not in the near term</td>
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<td>15. Who do you feel is responsible for looking after the long term development of athletes?</td>
<td>NGB, Clubs, schools and obviously coaches</td>
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<td>16. For long term athlete development to be a success in your sport do you need to be involved at school level or even younger?</td>
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<td>17. Do you feel Sport NI is doing enough at present for long term athlete development?</td>
<td>Yes.</td>
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<td>18. Has your sport received any help form Sport NI in relation to long term athlete development?</td>
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**Long Term Athlete Development Questionnaire**

Hello, my name is Raymond Miller from Stranmillis University College, Belfast and for my dissertation I am researching Long Term Athlete Development in a number of sports. All information will be kept confidential, used for research purposes only and will not be published. It would be of great help if you could fill out these questions in as much detail as possible. Please note that as you answer the questions in the boxes provided below, they will expand to allow room for your answer.

1. What is the main focus of your work?

   I am the Performance Manager for sailing in NI. My work involves managing our Champion Clubs, Regional Development Programme (UU16), Junior (U16) and Youth (U19 Squads). I also coach and manage 9 Elite Sailors.

2. Have you been introduced to Istvan Balyi’s long term athlete development model?

   Yes

   If answer is yes go to question 3, if answer is no go to question 11

3. Do you feel that this model is the right model for your sport? Why? / Why not?

   Yes. The average medallist age in sailing is around 30 with previous Olympic experience a must. Performances at a junior age does not always translate into Olympic medals and so we are aware of the stages and requirements for sailors to learn and develop both physically and mentally (above all at a young age). We can often get sailors dropping out at a young age as they have been pushed too hard and burnout. The model and making coaches, parents etc aware of it, is designed to help us keep sailors in the sport for life.

4. Would you have any criticisms of Istvan Balyi’s LTAD model?

   The simple messages are the best. It can be hard to relay the 10 Key Factors across to parents. Having the opportunity to educate them/coaches on it is not so simple. Also, people should know that you do not need to be too clinical about it all.

   The other major criticism is that there is not so much information on HOW to implement it. The messages are clear, but the HOW is not.

5. Do you feel there are parts of the model already being applied in your sport?

   Yes – in particular coaches at U15 level and relaying the messages from the model.

6. Has there been an LTAD model designed specifically for your sport?

   -
Educate the parents and change the culture of either wrapping out young athletes in cotton wool or putting too high an expectation on them. Trying to put these ideas across can appear to be “this is how to bring up your children”. If the culture and attitude of parents change through education, the rest should follow.

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<th>21. Do you know of any other models of sports development which you would like to follow?</th>
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<td>None as yet</td>
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