

# Long-term player development in rugby – how are we doing in South Africa?

Mike I Lambert<sup>1</sup> (PhD)

Justin Durand<sup>2</sup> (BSc (Med Hon) Exercise Science (Biokinetics))

<sup>1</sup> MRC/UCT Research Unit for Exercise Science and Sports Medicine, Department of Human Biology, University of Cape Town

<sup>2</sup> Discovery High Performance Centre, Sports Science Institute of South Africa

## Introduction

Rugby is a sport where size does matter. Players who are bigger, stronger and faster have an advantage over smaller, less powerful players. These differences in size are exacerbated at the junior levels where players reach puberty at different stages. Furthermore, the problem is compounded in South Africa, where children from a low socio-economic environment are generally smaller and less powerful than their counterparts from more affluent areas.<sup>1</sup> There is a strong likelihood that the smaller talented players will rather participate in sports in which they can express their talent and not be limited by their lack of size, as is the case in rugby. Some players in this group may be late developers, who possess the skills associated with success in rugby but lack the size. If these players are not managed appropriately, their superior skills may not ever have an opportunity to manifest and develop fully. This raises the point of having a well-constructed long-term talent development model<sup>2</sup> which considers that talent development is multi-factorial and dynamic in nature.<sup>3</sup> Such a model would consider the differences in size during puberty and cater as much for the slow developers as it does for the early developers. Developing talent is not an easy task and requires ongoing monitoring to ensure that there are progressions in skill, physical ability and cognitive maturation.<sup>3</sup> Failure to adopt a long-term talent development model, where talent and skills are developed systematically, will result in many players who may be late developers, choosing to play other sports where size is not such a distinguishing factor. This raises questions of whether rugby in South Africa needs to be managed differently to cater for these smaller players, particularly during the pre-pubertal years, where most of the variation in size exists.<sup>4</sup>

## What about New Zealand and Australia?

Young players in Australia and New Zealand are managed differently to the way young players are managed in South Africa. This can possibly be attributed to the fact that there are fewer rugby players in these countries compared with South Africa. Consider that South

**TABLE I. Registered male players (pre-teen, teens and adults) in South Africa, New Zealand and Australia<sup>5</sup>**

Age group	South Africa	New Zealand	Australia
Pre-teens	239 614	63 924	25 609
Teens	148 779	40 257	20 002
Senior	84 522	27 203	37 179
Total	472 915	131 384	82 790

Africa has over nine times the number of pre-teen players compared with Australia, and nearly four times as many as occur in New Zealand (Table I).

In South Africa, the number of players decreases systematically with increasing age, with only 18% of the total number of male players being senior players (Fig. 1). In New Zealand the pattern of decline across age groups is similar to that which occurs in South Africa (Fig. 1). The pattern in Australia is different to both the South African and New Zealand pattern as there is a small decrease in the number of players from the pre-teens to teen categories and then the numbers increase substantially from teens to seniors (Fig. 1). Even with this attrition South Africa has 2.3 times as many senior players as Australia and 3.1 times as many players compared to New Zealand (Table I).

These data can be interpreted in one of two ways. Either the Australian model attracts senior players to the sport, possibly through the other rugby codes which exist in Australia (Rugby League and Australian Rules Football), or the junior talent which exists in Australia is managed and developed more efficiently compared with the South African model, and to a lesser extent the New Zealand model. Another interpretation of the patterns between the three countries is that because there are so many players in South Africa (i.e. 9.4 and 3.7 times as many pre-teen players as in Australia and New Zealand respectively), the talent does not have to be managed as carefully as it does in Australia and New Zealand. By applying the principle of 'survival of the fittest', the best players make it through to the senior ranks in the South African system. However, with fewer players in both Australia and New Zealand, the importance of ensuring that they are well managed increases. A closer inspection of the talent development models of Australia and New Zealand reveals that this is indeed the case.

## Australian model

Junior players in Australia are exposed to rugby in a progressive way as part of a junior player pathway development strategy.<sup>6</sup> There are

## CORRESPONDENCE:

Professor Mike Lambert  
PO Box 115  
Newlands 7725  
Tel: 021-650 4558  
E-mail: Mike.Lambert@uct.ac.za

three categories of age groups, each with different rules and adaptations to the game:

- Walla rugby (7 - 8 years) – the game is played on a smaller field, with seven players per team and there is no tackling. The rules are designed to develop the game principles of possession, 'go forward' and pressure. The individual skills of passing and receiving, running and evasion, scrumming and line-outs are developed.
- Mini rugby (9 - 10 years) – the principles of Walla rugby are maintained, but the players are all introduced to the contact aspects of the game. The game is also played on a smaller field with 10 players in each team.
- Midi rugby (11 - 12 years) – this is the transition into the full game. There are 12 or 15 players on a standard size field.

From the age of 13 years the players are introduced to the game played under full rules. The Australian Rugby union maintains that the junior player pathway provides children with a safe and enjoyable introduction to the skills and practical principles of the game of rugby.<sup>6</sup> The gradual exposure to the skills is appropriate for their age. Physical development, size and body shape is not as important in this form of the game.

### New Zealand model

The New Zealand Rugby union has developed Small Blacks Rugby which is designed to help players develop their skills as their physical ability develops.<sup>7</sup> The intention is to make the game safe regardless of the player's age, shape or size. At the under-7 level there are 7 players per team and they play on a smaller field with no tackling allowed. At this level they also play Ripa Rugby which is a safe, non-contact game for boys and girls. This game is designed to improve ball handling and running skills.<sup>7</sup> From 8 to 10 years there are only 10 players per team and this game is also played on a smaller field. They are introduced to tackling, but players are not allowed to fend off a tackle. There is also a rule that if there is total dominance of one team (i.e. 35 points or more at half time) the coaches consult on a strategy which will even the competition in the second half. From the age of 10 - 13 years they play with 15 players per team on a full-size field and have modified rules (i.e. limited pushing in the scrum, no lifting in the line-outs). This development programme is designed to provide the players with skills so that when they play the full game they are suitably trained.<sup>7</sup>

### South African model

Although various provinces have implemented games for juniors with adjusted rules to cater for smaller players, there is no co-ordinated programme in South Africa. A programme which is gaining momentum in South Africa is TAG, which is played in about 300 schools around the country.<sup>8</sup> In this game there are no scrums and line-outs and tackling are not allowed. The aim of the game is to allow children to develop skills for rugby in a safe, fun environment. However, for this to serve the national game and prepare youth adequately for full-contact rugby it needs to be co-ordinated nationally.

### Summary

A long-term talent development model in rugby similar to those practised by Australia and New Zealand makes sense because these models are dynamic and consider the maturity status and level of development of the young players, with the overall result of being

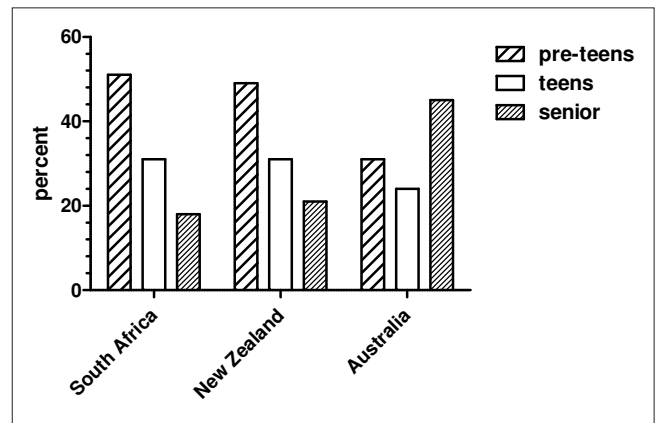


Fig. 1. Percentage of the total number of players (pre-teens, teens and seniors) in South Africa, New Zealand and Australia.<sup>5</sup>

more inclusive for players of all sizes rather than exclusive for smaller players. However, this approach will require a major paradigm shift in South Africa, and may take some time to implement. Failure to address the problem of significant body size mismatches in youth rugby in South Africa will result in a continuance of the current player attrition rate that is much larger than that which exists in other major rugby playing nations. While South Africa has a large pool of players to draw from, and therefore is less affected by the attrition of players, there is no guarantee that this situation will remain the same in the future. If the pool of players decreases, the implementation of a long-term player development model will be even more crucial because the talent will then become a treasured commodity.

### Acknowledgments

The contents of this paper were extracted and modified from a paper which was commissioned by the BokSmart programme. This is a national programme sponsored by ABSA and implemented on behalf of the South African Rugby Union and the Chris Burger/Petro Jackson Player's Fund. The goal of the programme is to teach safe and effective techniques which will reduce the incidence and severity of injury, make the game safer for all involved and improve rugby performance.

### REFERENCES

1. Armstrong ME. Youth fitness testing in South African primary school children: National normative data, fitness and fatness, and effects of socio-economic status. PhD thesis, University of Cape Town, 2009.
2. Vaeyens R, Lenoir M, Williams AM, Philippaerts RM. Talent identification and development programmes in sport: current models and future directions. *Sports Med* 2008;38(9):703-714.
3. Burgess DJ, Naughton GA. Talent development in adolescent team sports: a review. *Int J Sports Physiol Perform* 2010;5(1):103-116.
4. Lambert MI, Brown J, Forbes J. Skeletal development and the associated risk of catastrophic head, neck and spine injury. *www Boksmart.com* 2010;1-23.
5. International Rugby Board. website 2010 Available from: URL: <http://www.irb.com/>
6. Australian Rugby Union. website 2010 Available from: URL: [www.rugby.com.au/community\\_rugby/playing\\_rugby/playing\\_rugby\\_landing\\_page,77260.html](http://www.rugby.com.au/community_rugby/playing_rugby/playing_rugby_landing_page,77260.html)
7. New Zealand Rugby Union. website 2010 Available from: URL: <http://www.nzrugby.co.nz/SmallBlacks/tabid/933/Default.aspx>
8. Tag Rugby Association. website 2010 Available from: URL: [www.tagrugby.co.za](http://www.tagrugby.co.za)