An analysis of the first three generations of Australian IAAF World Youth Championships participants

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Every other year many young athletes aim to compete at the IAAF World Youth Championships (WYC), and coaches, parents, and sports institutes support them enthusiastically in their quest to represent Australia. But what happens to these athletes after they have achieved this initial high point in their athletics career? This study analyses the career paths of the athletes who made up the first three Australian WYC teams, from 1999 to 2003, and discusses the value of the WYC for the long-term development of athletes.

Introduction

The inaugural WYC held in 1999 was preceded by lively discussion on the usefulness and appropriateness of this new international championship event. Proponents argued that this biennial event would provide talented athletes with valuable competition experience at international level, and that it could motivate young athletes to remain in the sport, whilst opponents voiced concerns about early specialization (Schiffer, 2008).

Australian athletics coaches and administrators have been concerned about our high attrition rate for a long time. Most young and apparently talented athletes exit the sport before they even compete at senior level and long before they reach their full potential. Sometimes these talents are lost to other sports, a more recent example being Jamal Idris, whilst others drop out of performance sport altogether.

To date no quantitative or qualitative analysis has been published that addresses why so many talented youngsters never 'make it' to senior level, let alone succeed as senior athletes. There are of course many conceivable reasons why so many young people, including apparently very talented ones, leave the sport. These reasons include a lack of improvement, opportunities or support, injury problems, personal problems and shifting priorities during what is after all a formative and transitional life period.

Only some of these factors are influenced more or less directly by the actions of the athletes' coaches, parents and administrators. But there seems to be a general consensus within the athletics community that we should be doing better as a sport to retain more athletes for longer, including our most talented ones.

Australia has sent sizeable teams to all WYC editions, and they have all been remarkably successful. However, without taking anything away from the achievements of these athletes and their coaches, even a cursory glance at the names and results statistics suggests that most of these athletes who apparently displayed talent at age 16 or 17, subsequently didn't make a successful transition to senior athletics.

¹ Declaration: I am a board member of Athletics New South Wales, and the views and opinions expressed in this article are my own.

This study is an attempt at analysing how the first three generations of Australian WYC participants fared following their participation at WYC.

Method

I identified the participants of the 1999, 2001, and 2003 WYC from the statistics pages available on the Athletics Australia (AA) website. I chose only the first three generations for this analysis because it could be expected that these athletes are either well on their way or have already reached their full potential by 2011.

Participants who competed exclusively in relay events were not considered in this study. I only included athletes who were 16 or 17 years old. A few athletes participated as 15 year-olds and they were included in the analysis of 'their' generation, where applicable.

Using the performance data available on the AA and IAAF websites I then examined the progression of these athletes following their WYC participation, tracking their progress to World Junior Championships (WJC), and/or World Championships (WC), and/or Olympic Games (OG), where applicable.

My definition of 'success on the international stage' is a very narrow one, meaning qualification for a WC or OG final, or a Top 8 finish, and does not include any Commonwealth Games (CG) achievements, as CG success cannot be compared with success at OG or WC due to the absence of many of the world's best athletes in many athletics events.

I also established at what level the athletes competed from year to year, when they last competed for the purpose of determining their career duration post their WYC participation, and when they peaked.

Results

Table 1 contains the compiled career progression data for the three editions of the WYC considered for this study. All data up to and including the end of 2011 was included.²

	1999			2001			2003			TOTAL 1999- 2003		
	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total
Number of Competitors	10	10	20	13	10	23	8	14	22	31	34	65
WYC Top 8	5	5	10	6	7	13	4	5	9	15	16	31
WYC Medals	0	2	2	2	5	7	1	3	4	3	10	13
Progressed to WJC	4	6	10	7	6	13	2	8	10	13	22	35
Progressed to WC/OG after WJC	1	1	2	2	3	5	0	1	1	3	6	9
Progressed to WC/OG w/o WJC	1	0	1	1	1	2	2	0	1	4	1	5
Progressed to WC/OG Total	2	1	3	3	4	7	2	1	2	7	7	14
Top 8 finish at WC/OG	0	1	1	1	1	2	0	1	1	1	3	4
Of which medals	0	1	1	1	0	1	0	1	1	1	2	3

Table 1

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² Note that in the meantime walker Beki Lee, a participant at the 2003 WYC, has also qualified for her first senior international championships, the London Olympic Games.

1999

The 1999 generation, which consisted of 10 boys and 10 girls, brought home two medals (both won by girls) from Bydgoszcz, Poland. Half of the participants achieved a Top 8 finish. Half of these athletes progressed to compete at a WJC, but only two of this subgroup went on to represent Australia at a WC or OG, namely Jana Pittman and Scott Martin. Mark Fountain also went on to represent Australia at senior international level, but without having participated at WJC.

However, only Jana Pittman competed successfully at international championships, winning two gold medals in the 400m hurdles in 2003 and 2007.

Only five of the 20 athletes were still active in 2011, but only three of them, Eloise Wellings, Jana Pittman, and Scott Martin, at a high performance level.³ A quarter of the team never competed at senior level. Over half the team quit at or before age 23.

2001

The 2001 team competed very well in Debrecen, Hungary. With only three boys more than in 1999, this team achieved 13 Top 8 finishes and no fewer than seven medals, five of which were won by girls.

From the boys, only javelin thrower Joshua Robinson, 1500m runner Mitchell Kealey, and walker Jarred Tallent advanced to represent Australia at senior level, Tallent becoming the only internationally successful athlete from this generation, winning two medals at the 2008 Olympics and a bronze medal at the 2011 WC so far. Whilst Robinson and Tallent both finished in the Top 8 at WYC and used WJC as a stepping stone to their seniors career, Mitchell Healey did not finish in the Top 8 at WYC, did not qualify for WJC at all, but still went on to compete at the Beijing Olympics.

Four of the seven girls who finished in the Top 8 or gained a medal in Debrecen went on to compete at international championships. However, middle distance prodigy Georgie Clarke, having competed at the Sydney 2000 Olympics at age 16 where she made it to the semi-finals, only qualified for one more senior international championship, the 2001 WC, due to numerous injury setbacks. Fellow 1500m runner Lisa Corrigan peaked much later, in 2007, competing at the 2007 WC and the 2008 OG. Javelin thrower Kimberley Mickle has consistently been amongst the top Australian javelin throwers for many years now; it took her 10 years to reach world class level, which is not untypical for a thrower. High jumper Petrina Price competed at the 2004 Athens Olympics and the Berlin World Championships, peaking in 2009.

Four women and four men of this generation are still competing, but only javelin thrower Kimberley Mickle and walker Jarred Tallent at world class level.

2003

The 2003 team contained considerably more girls than boys, but the Top 8 places were distributed about evenly, the boys gaining four, the girls five. However, the girls won three of the four medals. Of the four medal winners, indeed of the five Top 8 place getters, only Sally Pearson-McLellan went on to represent Australia at senior level, and, as we all know, she continues to do so very successfully. The other four athletes peaked within two, three, and four years respectively; one in fact never improved her performance at the WYC.

³ In 2012, Scott Martin re-joined this group of world class athletes after battling injury, and Jana Pittman has effectively retired from athletics due to injury.

From the four boys, three peaked within two and four years, that is, they were barely into the senior years. Only hammer thrower Simon Wardhaugh peaked more recently. Of concern is also that the three other males retired from the sport very early, two of them within two years of entering the senior ranks, and one quit without ever competing in senior athletics. Ironically, it was an athlete who didn't do so well at WYC and didn't compete at WJC who was the only male of that generation to compete in a senior international championship, namely 400m runner Joel Milburn, who participated in the 2008 OG and the 2009 WC. But he too peaked quite early for a male 400m runner, at the age of 23.

1999-2003

Across the three generations of WYC participants, close to half of all participants gained a Top 8 placing at WYC. 20% won a medal, and it should be noted that the girls contributed three times as many medals to the tally as the boys. That's an impressive statistic.

Less impressive is the fact that only just over half of all athletes (54%) advanced from WYC to WJC.

Worse still, only nine athletes advanced to participate in a senior international championship after competing at WJC. Five athletes who did not compete at WJC nevertheless proceeded to compete in a WC or OG. That comes to a total of only 21.5% who advanced to a senior international championship event.

Only four athletes (6%) achieved a Top 8 finish at an international championship. Jana Pittman, Jarred Tallent and Sally Pearson won medals, Kimberley Mickle was rewarded with a 6th place 10 years after competing at WYC.

Figure 1 shows how long after their WYC participation these athletes peaked. Of course, it is still possible that some athletes may improve, particularly the few current world class athletes who are still active.

Of concern is that one quarter of all participants peaked in the year of their WYC, one even peaked the year before the WYC. An incredible 57% peaked within four years, that is, they were barely senior athletes. The vast majority (83%) of athletes never improved beyond age 23 or 24, and certainly not to the extent necessary to become world class.

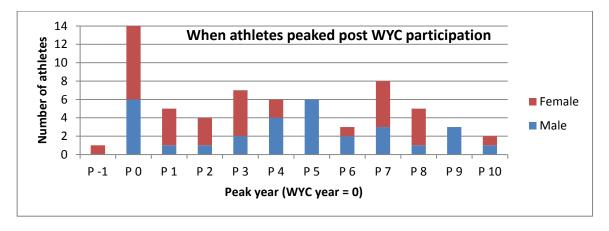


Figure 1

Also worrying is the drop-out rate of this cohort of athletes, as Figure 2 shows. A quarter of these talents disappeared within four years following their WYC participation, i.e. they never established themselves

as senior athletes. Certain is also that 43% of these athletes threw in the towel within seven years, that is before they reached what we could say are the potentially best years of their careers.

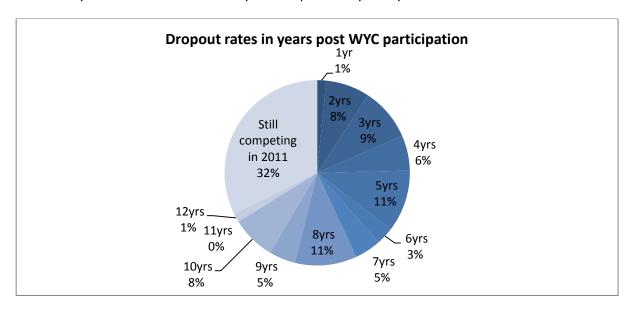


Figure 2

Discussion

This analysis strongly suggests that participation at WYC is no predictor for later international or even national success at senior level.

In fact, the statistics suggest it is highly unlikely that athletes who participate at WYC will 'make it' at senior level, whatever the reasons may be.

Also, participation at WYC can hardly be seen as a useful means for retention.

And yet, so much time and resources are invested, so much attention is paid every second year to young athletes who want to qualify and compete at WYC.

Also, if we examine the makeup of the Australian WC and OG teams in the relevant time period (2003-2011) we find no fewer than 18 athletes born between 1982 and 1987 (the range of birth years for the athletes eligible for the 1999-2003 WYC) who represented Australia without having participated at WYC. Amongst them are household names like Steve Hooker, John Steffensen, Fabrice Lapierre, and Benn Harradine. Interestingly though, only three of these 18 athletes are women, although most teams do consist of considerably more men than women. Most of the other athletes in those teams were older than the athletes from the three generations of WYC participants studied.

From the 20 male starters (relay-only starters excluded) at the last Olympics, nine were from the pool of athletes just described, only four were former WYC participants, and seven were older athletes.

It may well be that many of the athletes who participated at WYC and later dropped out or failed to progress were simply early developers, who didn't have the true potential to succeed at senior level in any case.

It may be that some specialised too early in their event which compromised their overall athletic development and their capacity to deal with adult high performance training, leading to injury and/or burnout.

It may be that some never possessed the psychological makeup, including the motivation, drive and dedication, to succeed at international level.

We could say it is probably inevitable that the majority of young athletes, even talented ones, drop out of our sport in those 'danger years', being the late teenage and early adulthood years. But if only four out of 65 (6%) apparently very talented athletes proceed to compete successfully at major international championships (WC and OG), then something is not right.

It would be interesting to undertake a more detailed qualitative analysis and assess each of the athletes who didn't 'make it' at senior level as to the their entire career progress, the reasons why their progress stalled, and why they dropped out of the sport before reaching their full potential, and compare them with the progress of athletes who did 'make it,' with or without having participated at WYC or WJC. This could be a most revealing exercise that could further our understanding and inform our future decision-making on talent identification and development.

Considering the sobering statistics I have presented here, perhaps we could begin by asking ourselves some questions:

How useful are the WYC as a stepping stone in the long-term development of our talented young athletes?

Should participation at WYC even be a desirable goal for these athletes?

Should we encourage participation at WYC as a matter of principle?

If the answers to these questions are all negative, then how do we overcome the fact that coaches and sports institutes are measured (or believe they are measured) by the short term success they can bring about, and how do we overcome this short-sighted thinking?

Is it realistic to expect those who are 'world class' at 16/17 years of age to be the best candidates to 'make it' at senior level, even with improved support, especially considering that in some event groups like the throws and the walks international success tends to occur much later?

Would it not be more productive for the IAAF (and Oceania/AA) to introduce an U23 championship?

We must be prepared to have a debate, do the research, ask the tough questions, and do things differently - and better, if we want to make the best of and do the right thing by our most valuable resources, our athletes, and if we desire sustainable success on the international stage.

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