



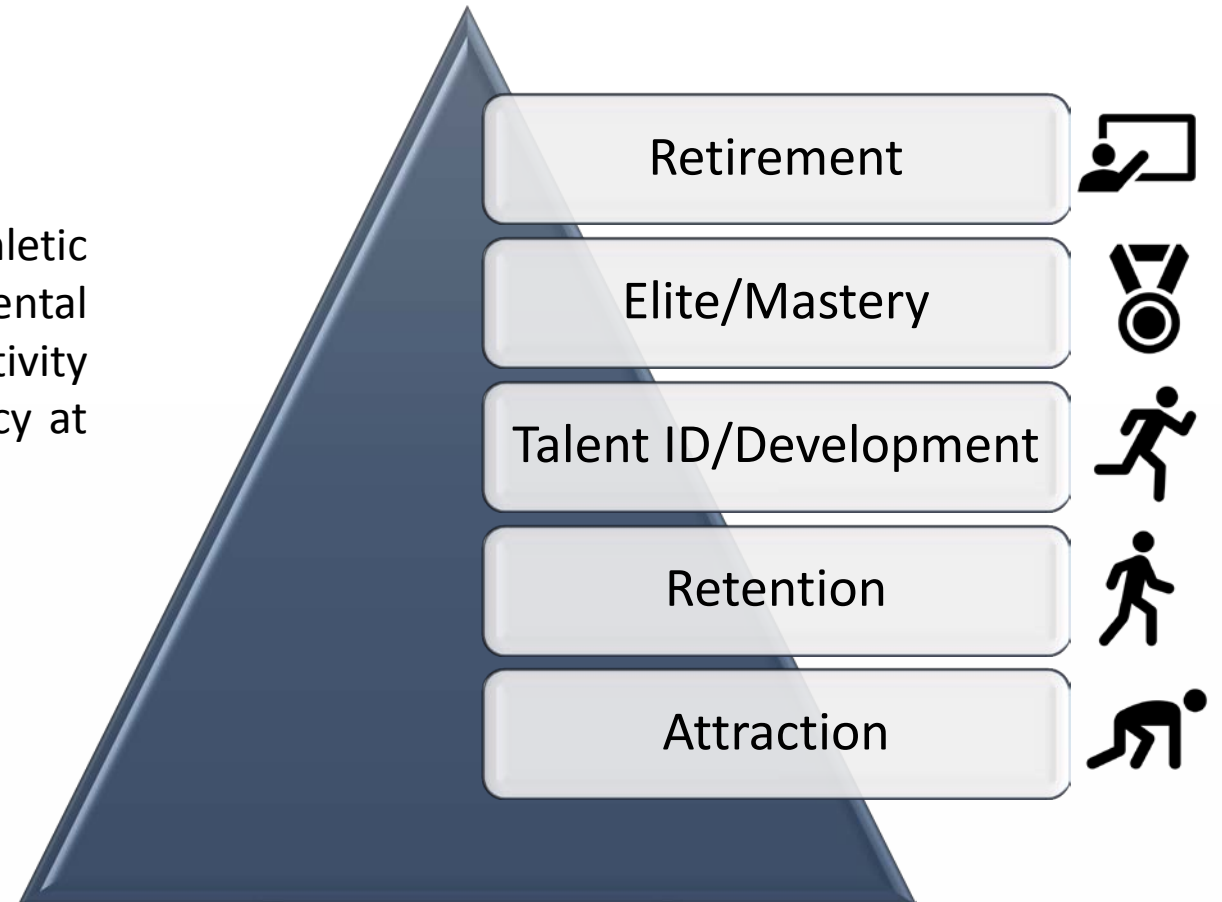
# Understanding Paralympic Athletes' Pathways: a preliminary investigation



# What is an athlete pathway?



Describes the entire continuum of athletic development - from initiation of fundamental movement and participation in physical activity through to lifelong engagement and proficiency at a senior, elite, and/or international level.



(Bloom, 1985; Cote, 2007; Gulbin, Croser, Morley, & Weissensteiner, 2013; Sotiriadou, et al., 2008; Wylleman and Lavalée, 2004)

# What is an athlete pathway?

- ✓ Understanding the development of elite athlete pathways is **complex and requires a multi-level approach**

*(Andersen, Houlihan, & Ronglan, 2015)*

- ✓ The interaction of these elements is also influenced by:
  - wealth;
  - political system;
  - geography;

**cultural and historical context that the countries are inserted.**

*(Digel, Fahrner, & Burk, 2006; Houlihan & Green, 2007)*

- ✓ Several researchers have attempted to outline athlete development frameworks and highlighted different stages in able-bodied sport.

*(Balyi & Hamilton, 2004; Bloom & Sosniak, 1985; Cote, 2007; De Bosscher, Sotiriadou, & van Bottenburg, 2013; Gulbin, Croser, Morley, & Weissensteiner, 2013; Henriksen, Stambulova, & Roessler, 2010; Sotiriadou, Shilbury, & Quick, 2008; Wylleman, Alfermann, & Lavallee, 2004)*

**Most of these athlete development frameworks are sport generic and none thus far have attempted to outline Paralympic athlete development pathways.**



## What do we know so far?

- Heterogeneity (variety) in athlete profiles
- Differences in type and origin of impairments (acquired and congenital)



- ✓ **Multi-variable environment**
- ✓ **The development phases are not uniform**



Potential gap in understanding how these pathways would be developed in parasport – *the differences in type of impairment make it even more complex*

## Research purpose

Understand the development of Paralympic athletes' pathways in an impairment specific approach.



Exploratory Study

- 32 face-to-face semi-structured in-depth interviews;
- **Brazilian** Paralympic Stakeholders;
- 5 sports: AT, SW, PO, WB, GB;
- Inductive thematic analysis.

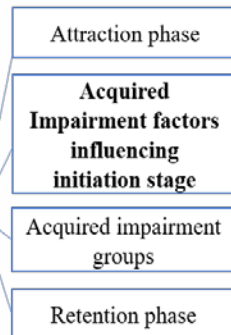
## Open-ended questions:

- Definition of each phase of development of an athlete pathway in Paralympic Sport;
- Differences among impairment groups and sports;
- How is the transition between phases;
- How do the various phases interact with one another.

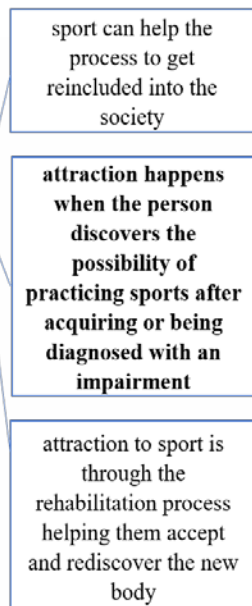
### Example raw data quote

"There are several possibilities for these phases to exist and several characteristics, mainly in the initiation in the sport. Many athletes, those who have an acquired impairment, they start in the sport by the necessity of doing rehabilitations, after having suffered some accident, and the sport help them to get back to society, for example. Other athletes have an accident or acquired a disability in adulthood and were former athletes and continue to practice the adapted sport or other sport because they already had a familiarity with the athletic life. So, sports initiation can be very diversified"  
[Expert 5]

### Example open-coding



### Example 1<sup>st</sup> level themes



### Example 2<sup>nd</sup> level themes



### Example broad themes

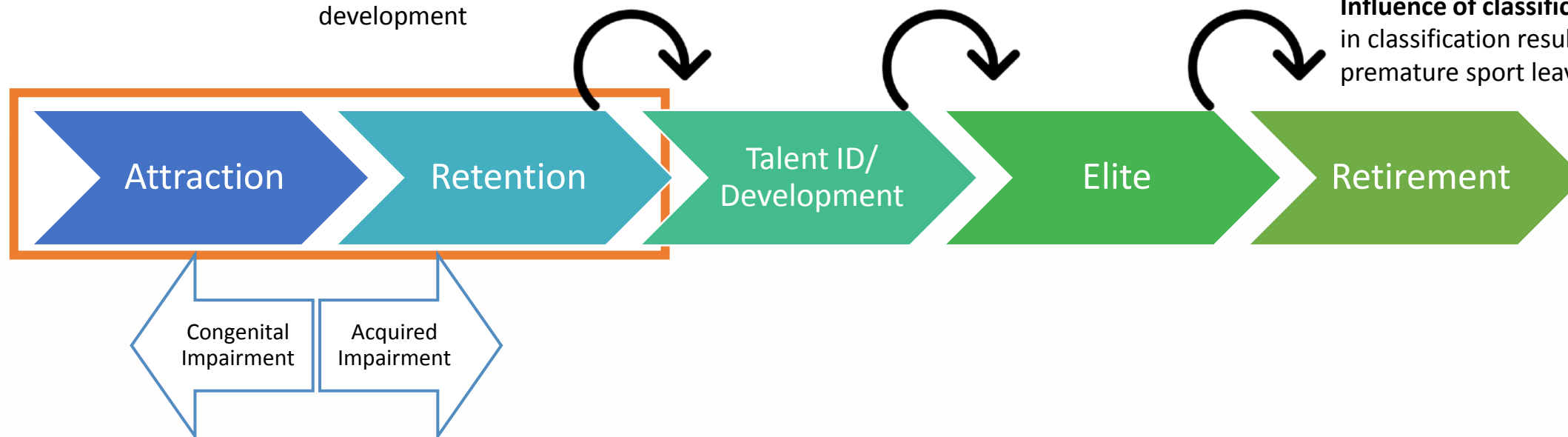


**Influence of Classification:** a correct classification in the beginning of an athlete career can avoid drop-outs and facilitate athletes' career development

## **Influence of Classification:**

investments and supports provided to an athlete are directly influenced by the classification

**Influence of classification:** change in classification resulting in premature sport leaving



**Contextual Factors**

**Leomon Moreno – 24 years old - Goalball (B1)**

- Silver medal at London 2012 Paralympic Games;
- Gold medal at 2015 Goalball World Championship;
- Bronze medal at Rio 2016 Paralympic Games;

**Type of impairment: Visual Impairment (VI)**

**Origin of Impairment: Congenital** – He was born with pigmentary degeneration of the retina



CPB / MPIX

**Attraction**

**At age of 7** was introduced to the possibilities of practicing sports in a club

**Retention**

**At age of 12** started playing Goalball. **At age of 14** participated in his first competition

**Talent ID**

**At age of 16** (2 years competing in GB tournaments) was identified as a talent when participating at Paralympic School Games

**Elite Phase**

**At the age of 19** won silver medal at London 2012 PG and at the **age of 20** was considered the best Brazilian player at the Word Championship scoring 51 goals





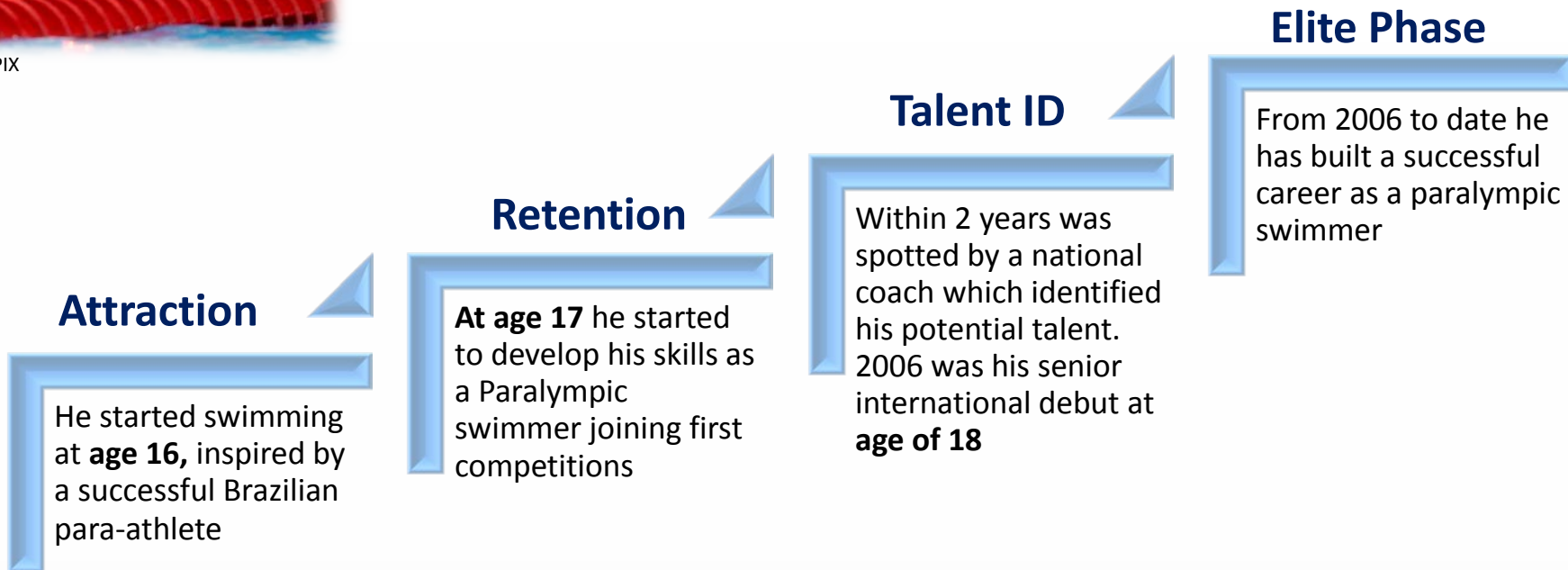
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## Daniel Dias – 29 years old – Swimming S5

During the 2016 Paralympic Games in Rio de Janeiro, he took his total of Paralympic medals to 24 and became **the most successful male Paralympic swimmer of all time**.

**Type of impairment:** Limbs deficiency

**Origin of Impairment:** **Congenital** – He was born without hands. His right arm stopped at his elbow, while his left arm was also shorter and had just a single finger. His right leg finishes at his knee and he has no foot.





**Susana Schnarndorf Ribeiro – 49 years old - Swimming S5**

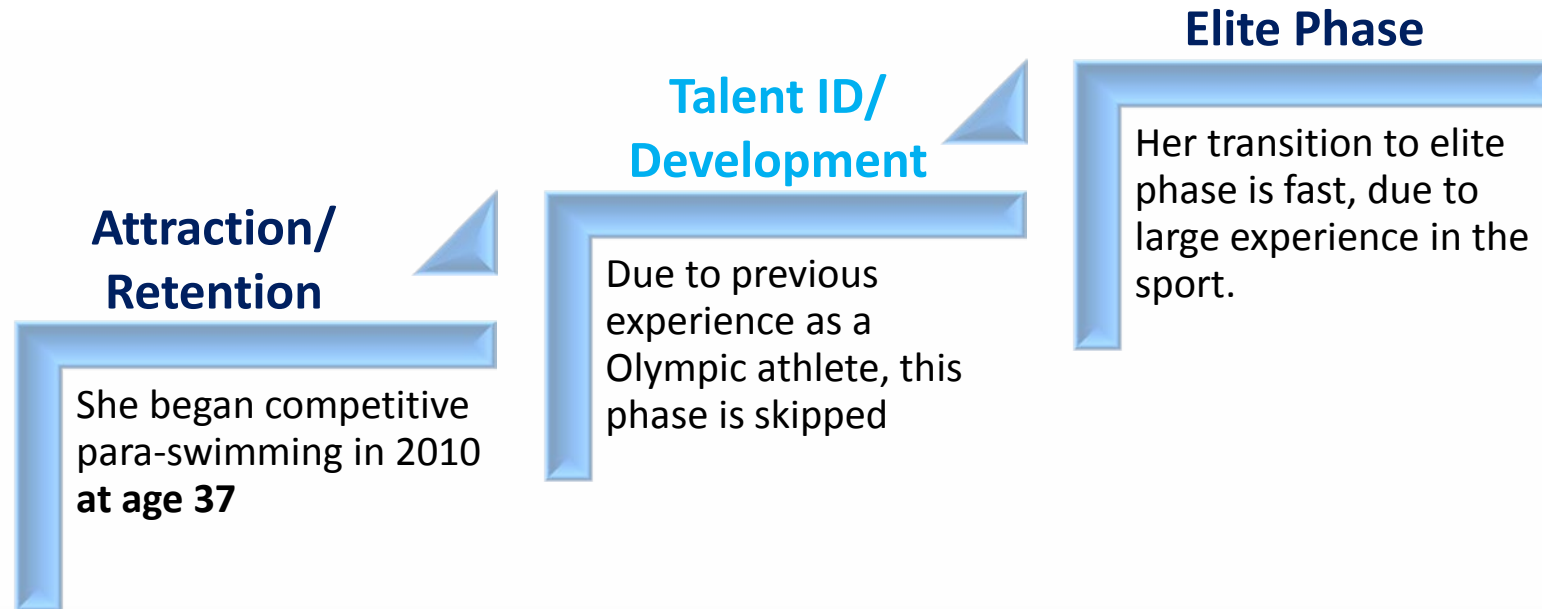
- Gold medal 100m Breaststroke SB6 at the Montreal 2013 World Championship

**Type of impairment:** Impaired muscle power - multiple system atrophy [MSA]

**Origin of Impairment:** **Acquired** - At age 37 the first signs of the disease appeared while she was a Brazilian five-time triathlete champion (**former able-bodied athlete**)



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Marcio Rodrigues and Daniel Zappe / CPB/ MPIX

## Petruccio Ferreira – 20 years old - Athletics T47

- Gold medal 100m T47 at the Rio 201 Paralympic Games, breaking the world record twice in two days;
- Gold medal 100m and 200m T47 at the London 2017 World Championship;

**Type of impairment:** Limb deficiency

**Origin of Impairment:** **Acquired** - At age 2 his arm was amputated below the elbow after an accident with a grinding machine on his father's farm

### Attraction/ Talent ID

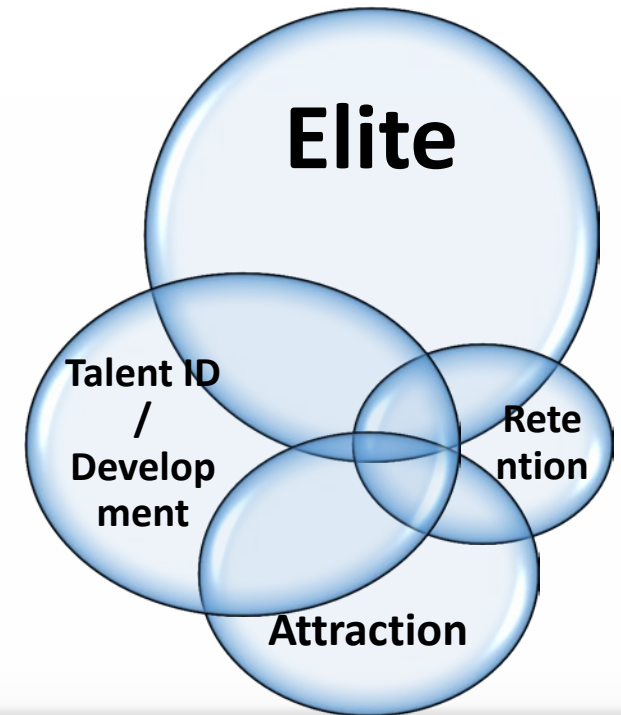
**At age 16** he took up the sport and was immediately signed up to compete at a school event and won, despite having never trained before

### Retention/ Transition to elite

**At age 17** was champion in every competition he took part, winning Gold medal at **2015** Toronto Para Pan American Games

### Elite Phase

**At age 19 and 20** (2016 and 2017) he was Paralympic, World Champion and record breaker.



Attraction Retention Talent ID Elite Age discovered impairment

# Results

Age 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 32 34 36 38 40 42 44

Leomon



Daniel



Suzana

*Able-bodied sport career*



Petrucio





- ✓ There is no 'one fits all approach' to athlete pathways
- ✓ Identify a set of broad principles that can be adapted to local environments in a culturally appropriate manner
- ✓ Sport organisations can identify preferred development pathways in their own sport, and then build programs and implement strategies to encourage participation and promote excellence.

**The long term-goal is then to develop a framework of reference for further exploration**

*"Disability is a limiting word that classifies a person. We all have deficiencies and limits. I am not a disabled athlete, I am a Paralympic athlete" (Daniel Dias, Brazilian Paralympic Swimmer)*





# Thank you!

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# Obrigada!