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 Lavallee, 2004)
Several researchers have attempted to outline athlete development frameworks and highlighted different stages in able-bodied sport.

(Andersen, Houlihan, & Ronglan, 2015)

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

(Patatas & De Bosscher, 2017)

The interaction of these elements is also influenced by:

- wealth;
- political system;
- geography;
- cultural and historical context that the countries are inserted.

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

(Patatas & De Bosscher, 2017)
**Research purpose**

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

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

**Problem definition**

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

**Exploratory Study**

*Patatas & De Bosscher (2017)*
• 32 face-to-face semi-structured in-depth interviews;
• **Brazilian** Paralympic Stakeholders;
• 5 sports: AT, SW, PO, WB, GB;
• Inductive thematic analysis.

**Methods**

**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.
Influence of Classification: a correct classification in the beginning of an athlete's 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:
- Congenital Impairment
- Acquired Impairment

Attraction > Retention > Talent ID/Development > Elite > Retirement

Patatas & De Bosscher (2017)
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

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

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

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

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 World Championship scoring 51 goals

Patatas & De Bosscher (2017)
Case 2

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.

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**Attraction**

He started swimming at age 16, inspired by a successful Brazilian para-athlete.

**Retention**

At age 17 he started to develop his skills as a Paralympic swimmer joining first competitions.

**Talent ID**

Within 2 years was spotted by a national coach which identified his potential talent. 2006 was his senior international debut at age of 18.

**Elite Phase**

From 2006 to date he has built a successful career as a paralympic swimmer.

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Patatas & De Bosscher (2017)
Case 3

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)**

She began competitive para-swimming in 2010 at age 37

Due to previous experience as a Olympic athlete, this phase is skipped

Her transition to elite phase is fast, due to large experience in the sport.

Patatas & De Bosscher (2017)
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

Elite Phase

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

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

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

Patatas & De Bosscher (2017)
Results

Age discovered impairment

Attraction  Retention  Talent ID  Elite

Leomon

Daniel

Suzana

Able-bodied sport career

Petrucio

Patatas & De Bosscher (2017)
✓ 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)
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Patatas & De Bosscher (2017)