

Long-Term Development in Sport and Physical Activity: The Key Factors

Developed by:
Sport for Life

Presented by:
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PRESENTERS



DR. PAUL JURBALA

Paul is a Long-Term Development advisor with the Sport for Life Society. With over 35 years of experience in sport, he works to support projects with National, Provincial Sport and Multi-Sport Organizations and other partners. In his own sport of Cycling, Paul is a Master Coach Developer and has led development of the coach education program for 15 years. Paul holds a MSc degree in Exercise Physiology and a PhD in Applied Health Sciences - Sport Management (Brock University), with a focus on change and decision-making in sport organizations.



DEBBIE KIRKWOOD

Debbie is the former Director, High Performance for Tennis Canada, where she was involved in every aspect of the player pathway. Debbie led the development of the organizations LTAD model, a two-year project that involved a team of over 60 people including (Sport for Life, the Canadian Olympic Committee, Provincial/National Coaches, & Board of Directors). She also assisted in the development of Canada's National Training Centre Programs & its Data Analytics Programs. A fully certified Level 4 coach, Debbie is a former national coach & international junior team captain. Debbie is also a two-time Pan Am Games Team Leader (1999 & 2015) & Olympic Games Team Leader (2016). Debbie is a current member of the International Tennis Federation's (ITF) Coaches Commission & the ITF's World Tennis Tour Player Panel (Appointed Coach, women) both positions, for the 2020 – 2021 term.

Today:

Key Factors of Long-Term Development:

1. Background and Overview
2. The “Ten S’s of Training and Performance”
3. The Key Factors: What they mean for athletes, coaches and sport organizations
4. The Key Factors in Action
5. Questions

What is Long-Term Development?

A guide to optimizing the athlete pathway

“The **pathway** describes the systems, programs and services that support athlete progression from learning sport skills through the achievement of podium results. ”

- Sport Canada

LTD is a rational, evidence-based, empirically-tested framework for *optimizing the factors* that contribute to performance and participation... “How do we RETAIN talent” rather than “How do we IDENTIFY talent”.

There are “MANY ROADS TO ROME” – Italian Proverb

Long Term Development is complicated!



Life-long Physical
Activity

Excellence

Developing
Physical Literacy

Long-Term Development Framework

Active for Life

Enter at any age



Train to Win

Males 19 +/- and Females 18 +/-



Train to Compete

Males 16-23 and Females 15-21



Train to Train

Males 12-16 and Females 11-15



Learn to Train

Males 9-12 and Females 8-11



FUNDamentals

Males 6-9 and Females 6-8



Active Start

Males and Females 0-6



Build Stage by Stage

1. Early stages (bottom) build a foundation of Physical Literacy and basic sport skills.
2. Excellence stages (triangle at left) provide appropriate development toward high performance.
3. Competitive for Life, Fit for Life phases in Active for Life are the active future for all of us – enter from any stage after onset of puberty.

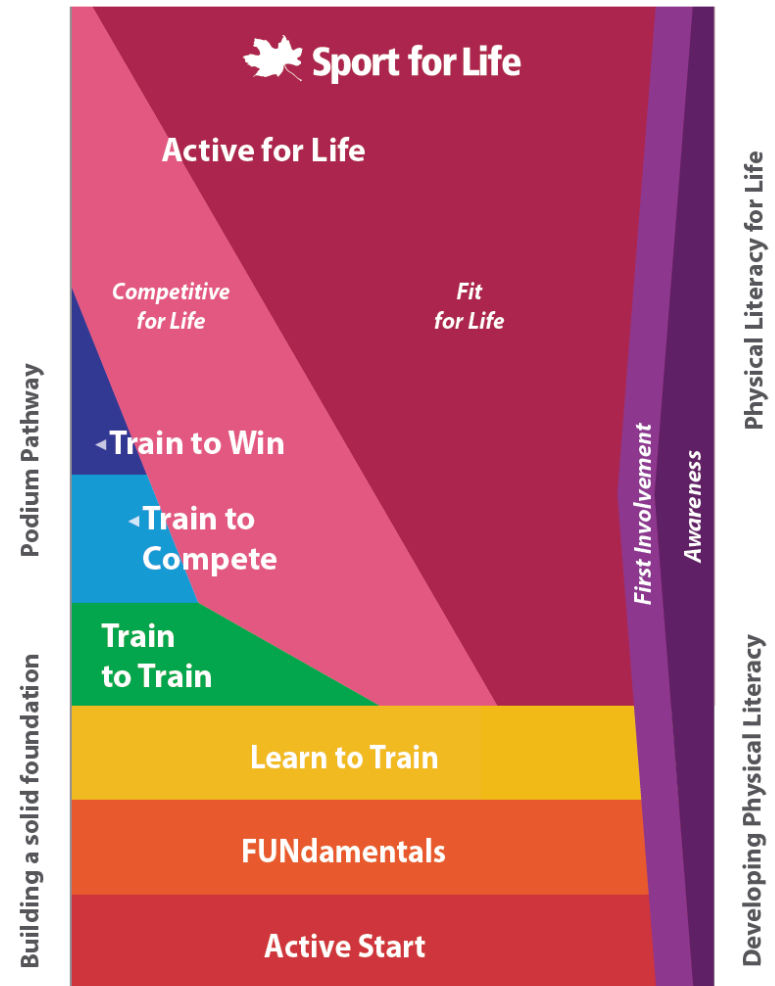


Figure 4: Sport for Life Rectangle

Guiding Principles

1. Quality is key
2. Optimal programming is critical
3. Inclusion is non-negotiable
4. Collaboration makes the system better



From Sport to Quality Sport

Quality sport

based on Long-Term Athlete Development is...



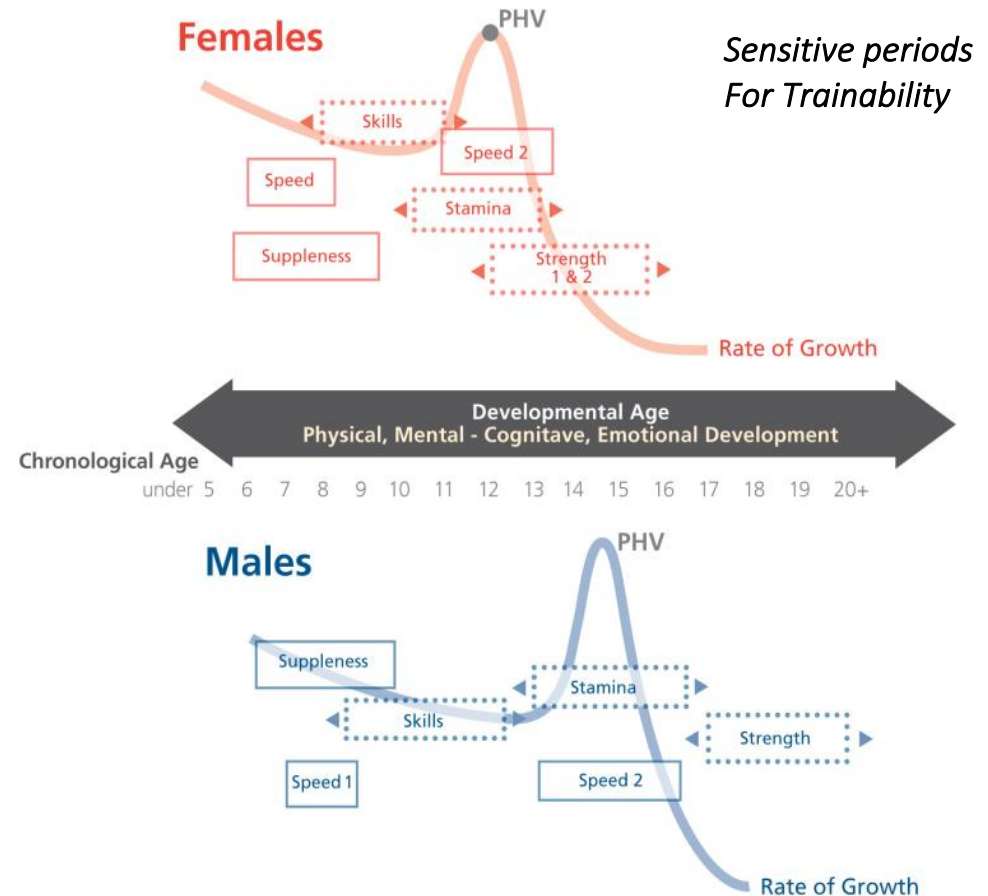
The “Ten S’s of Training and Performance”

Physical characteristics

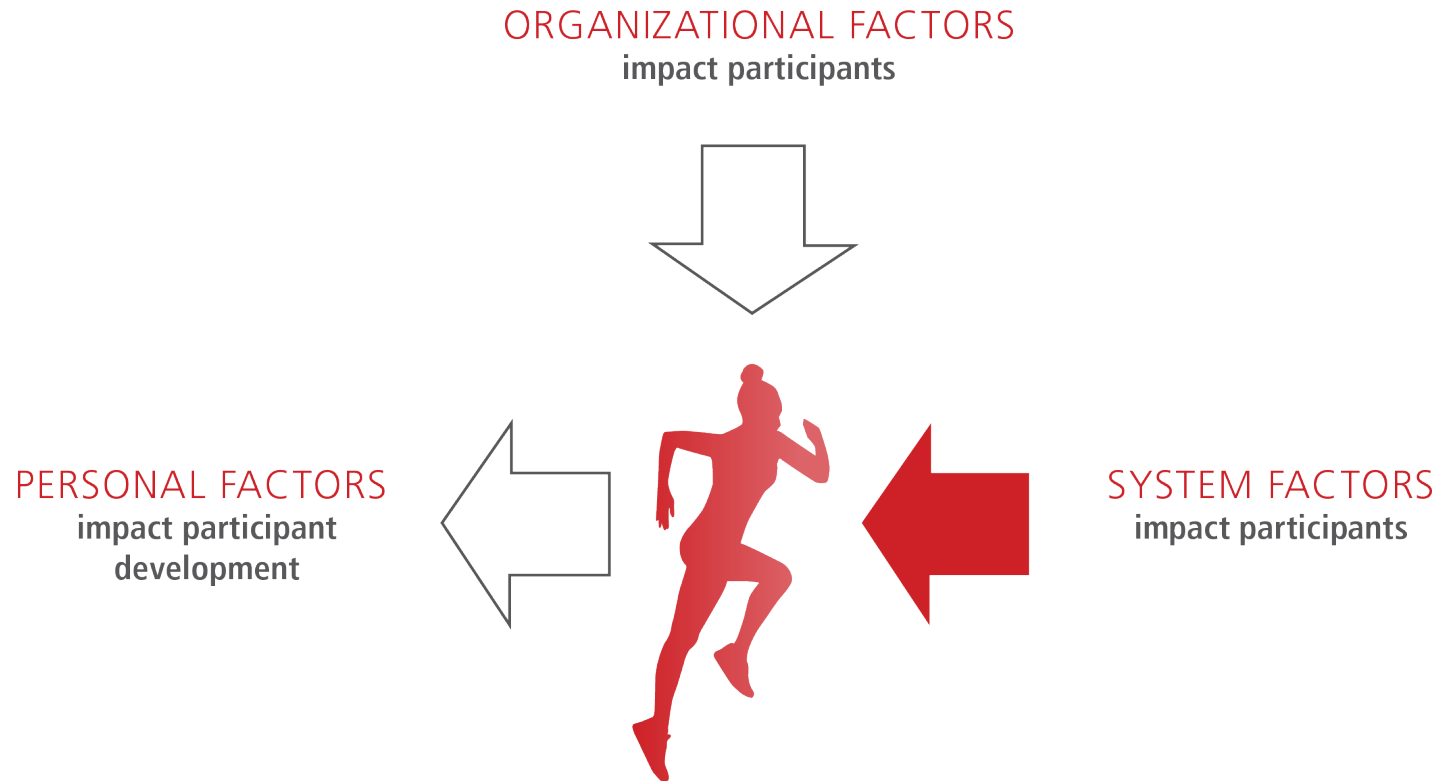
1. Stamina (endurance)
2. Strength
3. Speed
4. Skill
5. Suppleness (flexibility)

...supported by

6. Structure/stature
7. (p)Sychology
8. Sustenance
9. Schooling/work
10. Socio-cultural



The Key Factors



22 Key Factors: 7 Personal Factors

- Physical Literacy
- Quality Environments
- Developmental Age
- Sensitive Periods
- Predisposition
- Excellence Takes Time
- For Life

Players,
parents,
coaches:
*What to
develop,
when, and
how?*

Developmental Age



Personal Factors in Action

#2 Quality Training Environments

- **National Centres, Regional Centres, Clubs & Private Academies**
- **World-class Daily Training Environments (DTE) combined, with proper competitive development plans = increases chances for long term developmental success**



Personal Factors in Action

#3 Developmental Age

(for each stage the global development components covered)

Psychological	Physical
• Higher level of focus and engagement in training. • Developing and understanding the love of competing. • Projecting a calm and positive attitude. • Learning to effectively manage mistakes in a positive manner. • Consistently working hard and being committed to improvement. • Developing an ability to self-manage and be responsible while away from home. • Fostering the concept of respect for coaches, officials and other players.	<u>Priority 1</u> Coordination skills • Skip rope using different kinds of footwork . • Throw with one or two hands using different kinds of throws. • Adapt to changing rhythms. • Maintain balance in different situations. • Perform multi- tasks at the same time. Speed and agility To be able to: • react quickly to multiple signals, • have good multi- directional running techniques Decision making skills The child should further develop reaction speed, time-space analysis and coordination under more difficult situations. Perform multiple tasks at the same time. * Coordination in the form of timed contests/games or competitions context.

Personal Factors in Action

#6 Excellence takes Time



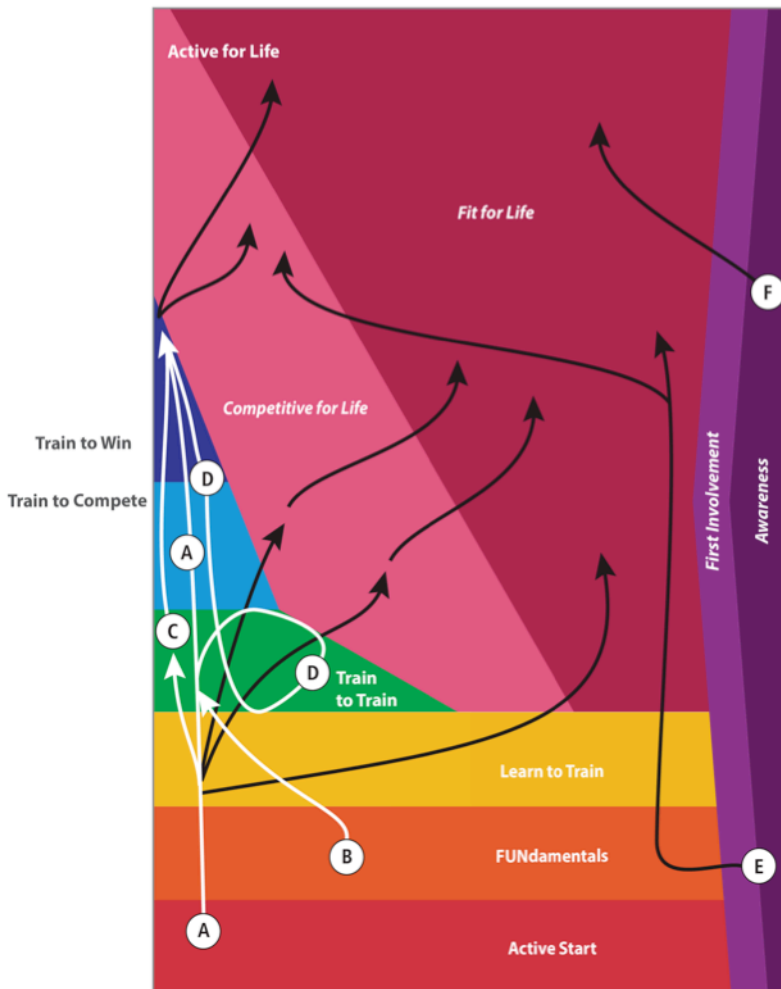
Podium Pathway - Men 6 yrs. (sport “initiation”) to approx. 28 yrs. (the start, of Podium Performances) = **22 years!**
- Women 6 yrs. (sport “initiation”) to approx. 26 yrs. (the start, of Podium Potential) = **20 years!**

22 Key Factors: 8 Organizational Factors

- Framework
- Governance
- Awareness and First Involvement
- Different Activities (have different demands and pathways)
- Appropriate Specialization
- Periodization
- Competition
- Transitions

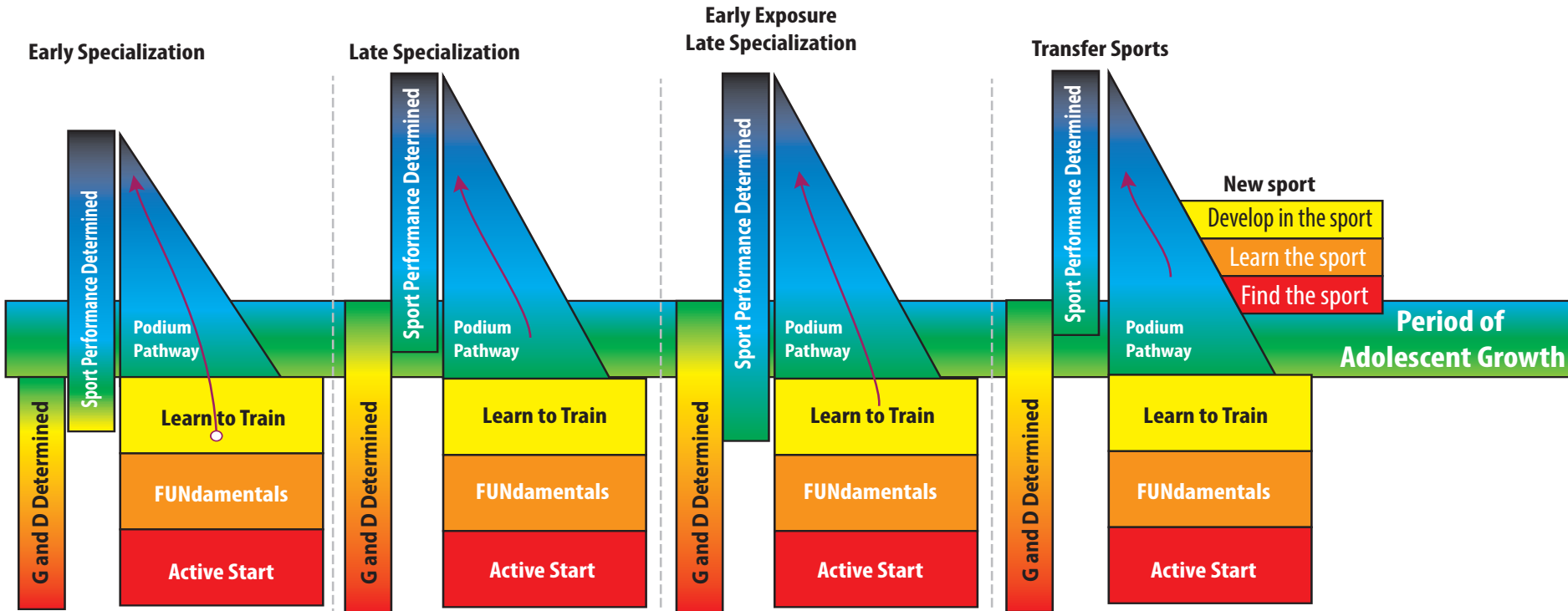
Club, State,
Province:
*Creating the
player-
focused
training and
competition
environment*

Diversity of specialization/ Pathways



1. Recognize sport-specific specialization in key factors (Different Activities, Appropriate Specialization, Diversification)
2. Recognize different pathways or journeys for different athletes (Different Activities, Transitions)
3. Identify need for organizational and system support to address these issues.

Different sports have different demands and different pathways



Train to Train Focus

Early specializations: Managing the high level of skilled execution developed before puberty during the changes in body shape and size associated with adolescence. Plus development of physical capacity.

Learn to Train Focus

Early specializations: Develop high levels of sport specialized skills while continuing to take into account the lower cognitive, emotional, and psychological readiness of the athletes.

Late specialization: Building the engine (physical development) and greater technical, tactical and strategic capacity linked to specialization of event or position.

Late specialization: Build solid base of all-round foundational sport skills in multiple sports to provide options for later transfer to others sports.

Early Exposure - Late specialization: Building the engine (physical development) and greater technical, tactical and strategic capacity linked to specialization of event or position.

Early Exposure - Late specialization: Build solid base of all-round foundational sport skills in multiple sports to provide options for later transfer to others sports with greater emphasis on sport of choice.

Transfer sports: Athletes generally enter the sport during late adolescence or shortly thereafter. With adolescence almost complete focus on remedying below standard capacities

Transfer sports: Sport not involved with the athlete at Learn to Train.



Competition

Competition is a good servant but poor master!

Organizational Factors in Action

(Highlights – Tennis)

(#2) Fully embedded:

- Club Development
- Coach Certification
- Club Coach Education
- Parent Education
- Technology

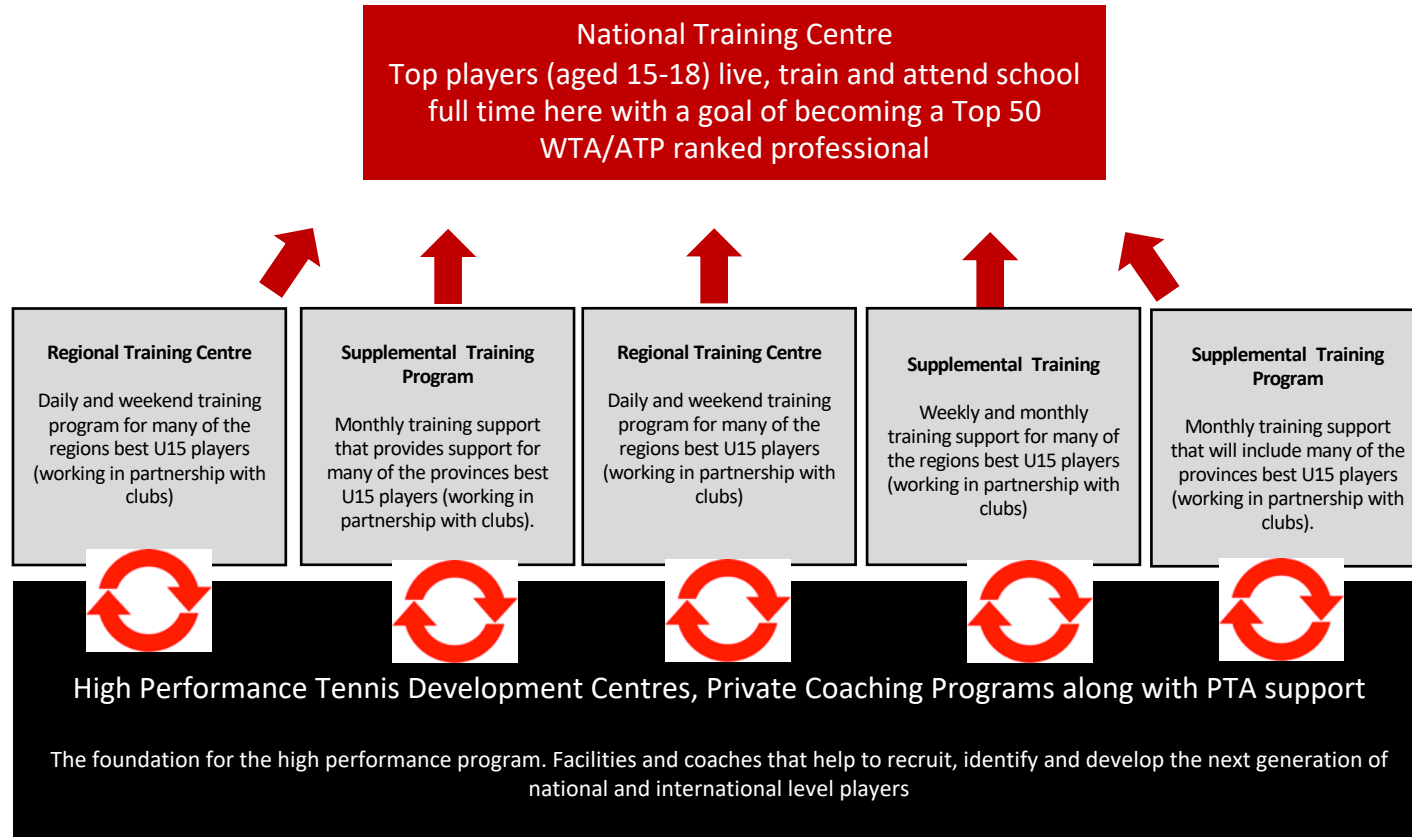
(#4) Different Activities

(#5) Appropriate Specialization

(#7) Competition

Organizational Factors in Action

#2 Fully Embedded - Club Development



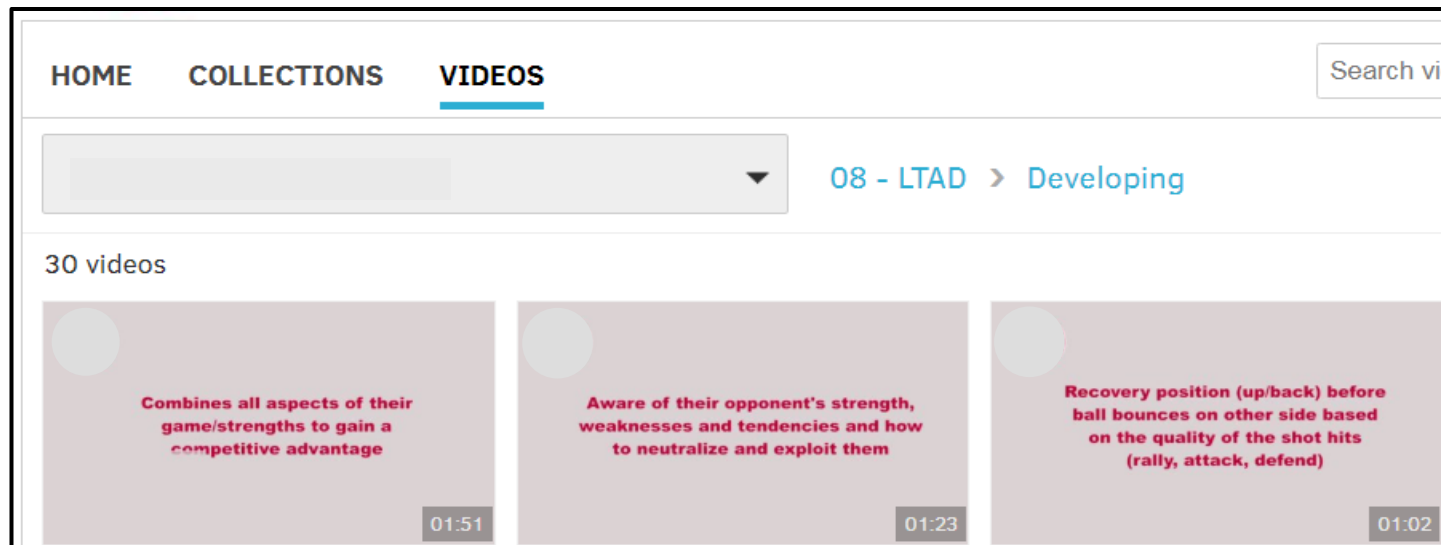
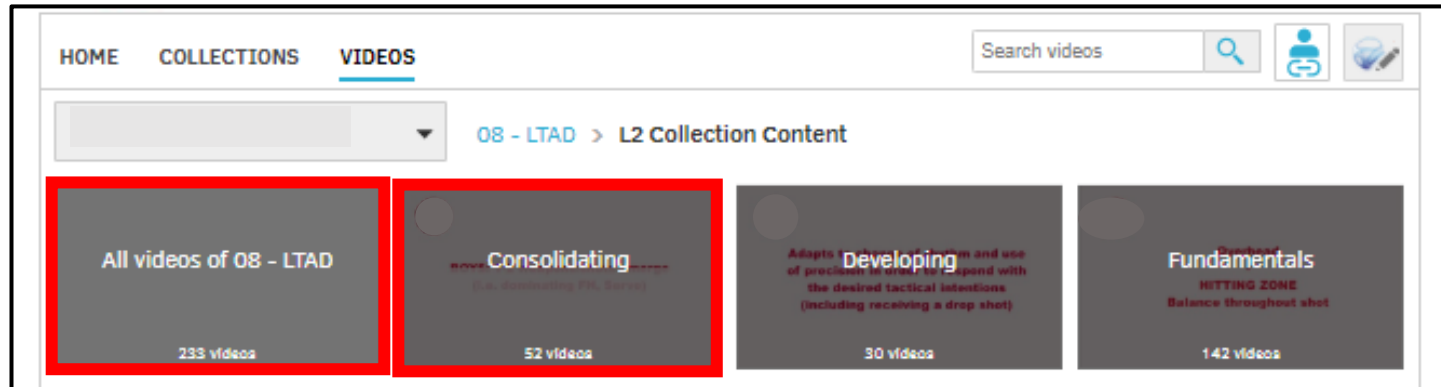
Organizational Factors in Action

#2 Fully Embedded - HP Coach Education)



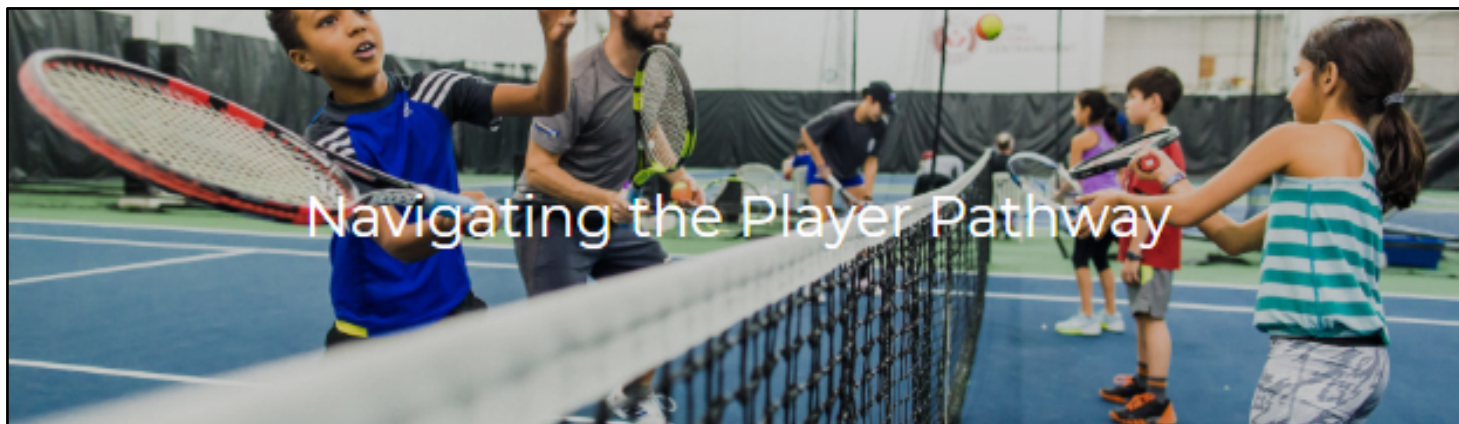
Organizational Factors in Action

#2 Fully Embedded - Coach Development)



Organizational Factors in Action

#2 Fully Embedded- Parent Education



Navigating the Player Pathway

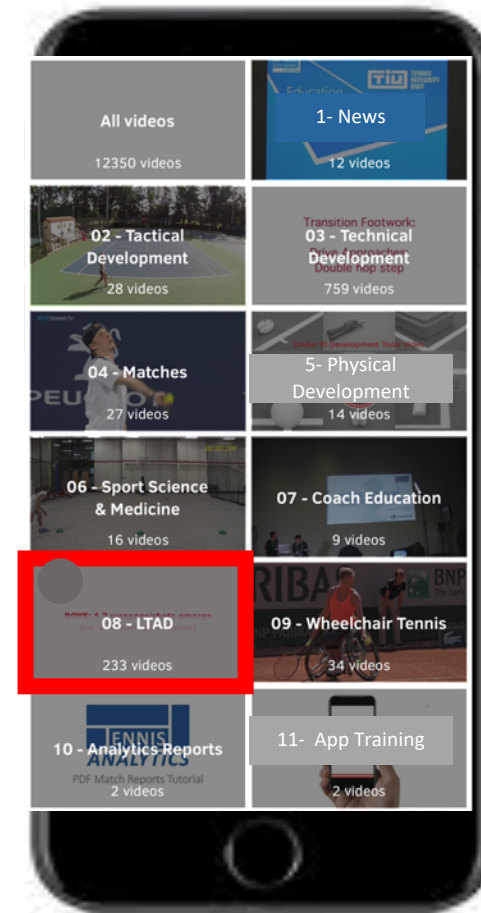
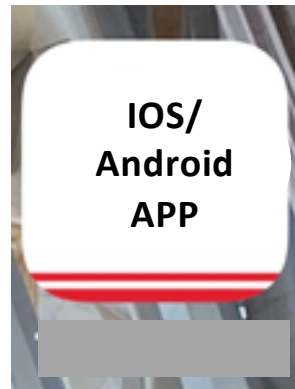
Understanding the various pathways available for your child within tennis can make the overall experience simpler, and more relaxing. The early stages of tennis development are particularly important to ensure the right balance and focus for your child.

Resources

- [LTAD: Fundamental Movement Skills + Literacy Chart](#)
- [Player Development Handbook](#)
- [Video: Get More from Sports](#)
- [Player Pathway](#)
 - [FUNdamentals Stage](#)
 - [Developing Stage](#)
 - [Consolidating Stage](#)

Organizational Factors in Action

#2 Fully Embedded – Technology



Organizational Factors in Action

(#4) Different Activities

- High Kinesthetic
- Common

(#5) Appropriate Specialization – defined Tennis as an early “initiation” sport (see above)

(#7) Competition – Tennis players tended to over-train & under-compete. Did not get enough quality matches. So we provided competition match (singles & doubles) along with practice match guidelines tied to a 3:1 win/loss ratio.

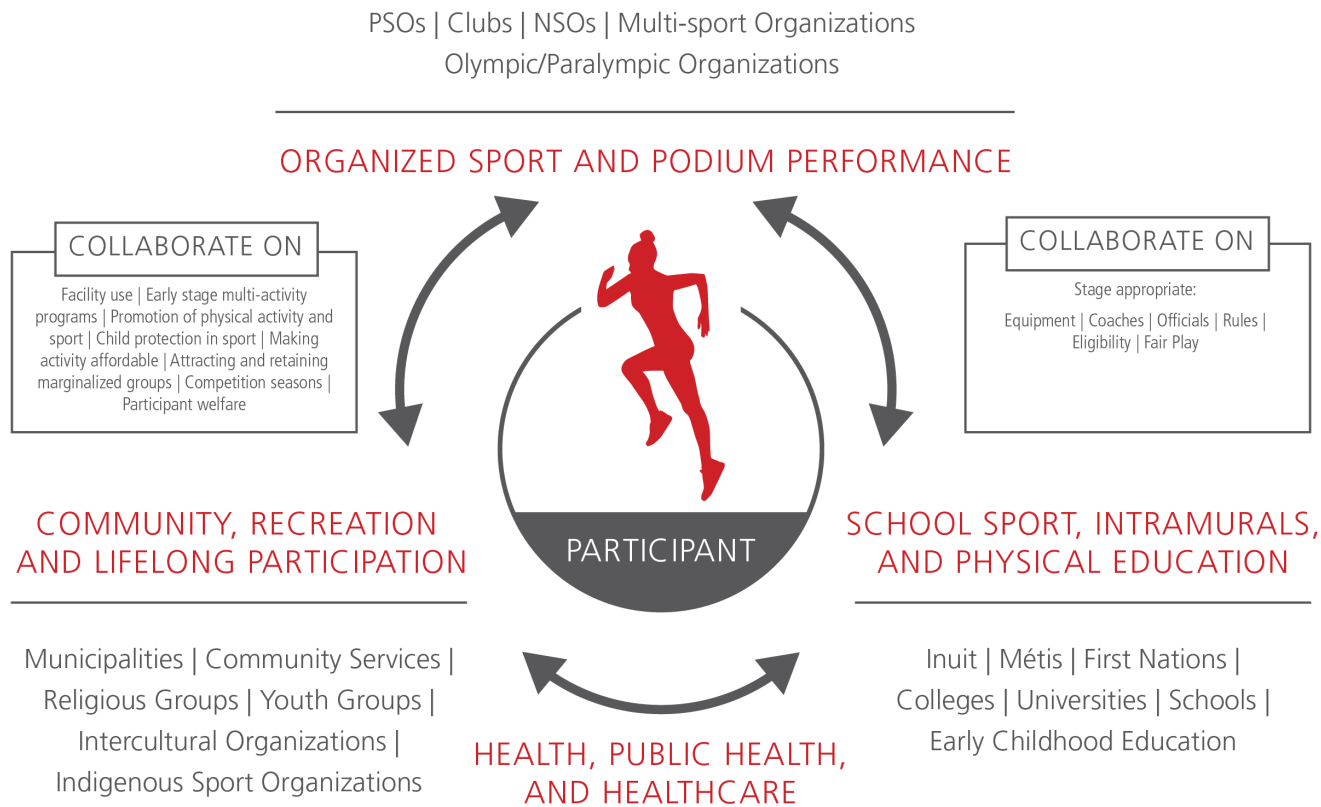
22 Key Factors: 7 System Factors

- Collaboration
- System Alignment
- Welcoming
- Diversification
- Long-Term Development
- Continuous Improvement
- Evidence Based

NSO, NOC
& system
funders:
*Creating
culture and
maintaining
an effective,
collaborative
system*

Aligning stakeholders

Multi-Sectoral



System Factors in Action

TENNIS FOR LIFE Playing and enjoying tennis for life. Participants with Physical Literacy can transition smoothly to being "Tennis for Life" In addition, there should be a smooth transition from a players competitive career to life-long physical activity and participation in tennis	OBJECTIVE	LTAD STAGE	AGES	Programs
	Podium Performances	#7 - LIVING AS A PRO (Milos, Vasek, Genie, Gaby)	24+ 22+	Pro Tennis
	Putting it all together	#6 - <u>LEARNING TO BE A PRO</u> (Bianca, Denis, Felix, Leylah)	19-23 17-21+	Transition Program
	Beginning to put it all together!	#5 - LEARNING TO PERFORM	16-18 15-16	NTC
	Setting the foundation for the pursuit of excellence.	#4 - CONSOLIDATING	13-15 12-14	NJTPs, PTAs, Clubs & Coaches
	Becoming a well-rounded athlete and building the full court tennis skills required to be a player.	#3 - DEVELOPING	9-12 8-11	NJTPs, PTAs, Clubs & Coaches
	Learning the FUNDamentals & having fun through progressive tennis & other sports	#2 - FUNDAMENTALS	5-9 5-8	PTAs Clubs & Coaches
	Starting it off right!!	#1 - ACTIVE START	0-5	Clubs, Coaches & Parents



System Factors in Action

(#3) Safe and Welcoming – hired a FT Director, Safeguarding. All coaches must pass course & background check to work

(#4) Diversification – Stage #3 title (Developing). Goal Statement – develop an overall “athlete”

(#5) Long Term Development (Denis, Bianca, Felix, Leylah) **Stage #6 LEARNING** to be a Pro/Training to Win)



(#7) Evidenced Based – the Sport Sciences & a data driven Podium Results Track (PRT)

System Factors in Action

#7 Evidence Based, PRT

(Kirkwood, presentation, 2006)

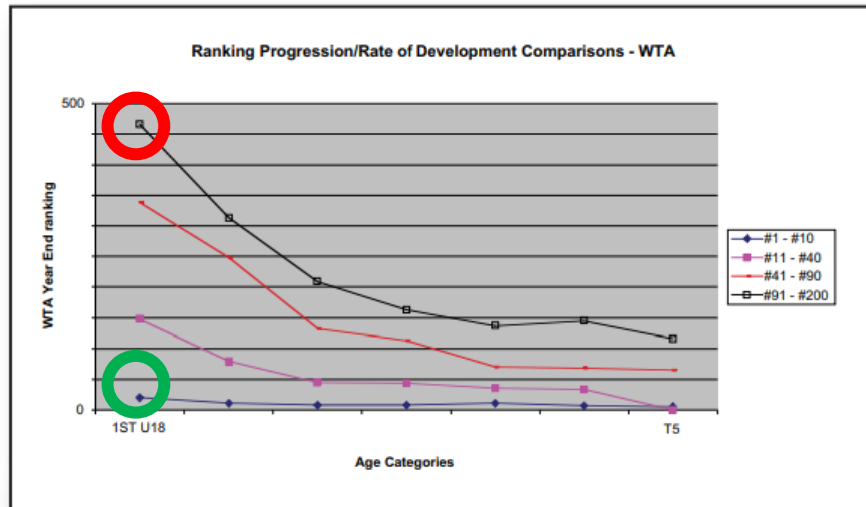


Chart 3.0 illustrates the rate of development (as measured by rankings) for four groups of elite female tennis players aged 17-23.

(Kirkwood, presentation, 2006)

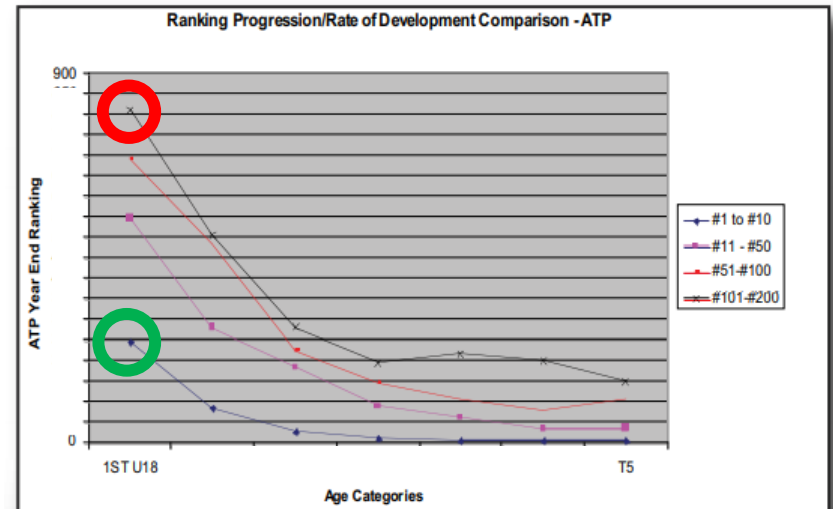


Chart 3.1 illustrates the rate of development (as measured by rankings) for four groups of elite male tennis players aged 17-23.

The Change We Need

Lead	From	To
System (refer to governments, NOCs, MSOs etc.)	Exclusionary development models (pyramid)	Inclusive development framework (rectangle)
System	Goals for sport	Goals for society
System	Separate systems	System alignment
System	Physical activity	Physical literacy
System	Working alone	Working together
Organizations (refers to NSOs, PTSOs & LSOs)	Chasing wins	Meaningful competition
Organizations	Exclusion/cutting	Inclusion/transfer/tiering
Organizations	Age-based coaching	Stage-based coaching
Organizations	Adult training of youth	Junior periodization

A Catalyst for Culture Change

Who	Responsibility	To Promote	Leading to	Resulting in	Outcomes	Long-term Development Impact
Governments (F-P/T)	Long-Term Development pathway and physical literacy policies	Sport for Life Framework at F-P/T levels	Sector and system alignment	Sport for development and physical literacy strategies	Sport for Life contributing to community health and wellness	More physically literate population, more excellent athletes, and more people active for life
Organizations	Long-Term Development frameworks (for all participants)	Good: leadership governance policy staffing	Quality programming	Developmentally appropriate activity and competition	Greater retention of athletes and participants	
Leaders and Coaches	Long-Term Leadership and Coaching Development framework and education strategy	Stage-based coach/leader training curriculum	Paradigm shift stage-based periodization and training	Developmentally appropriate training and physical activity	Planned meaningful competition	

Conclusion

- Master your understanding of the core global components that make your sport.....
“unique”
- **Development is complicated & takes time!!**
- Look to apply the information contained in your Pan Am Guidebook & these 8 webinars
- This presentation we looked at how the Key Factors of Development have been applied in Tennis:
 - **(1) PERSONAL FACTORS**
 - **(2) ORGANIZATIONAL FACTORS**
 - **(3) SYSTEM FACTORS**
- Ensure all is evidenced based, and is continually refined!

Q & A

THANK YOU!

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