ADVANCED PERFORMANCE FOOTBALL COACHING

CURRICULUM DESIGN & CONTEMPORARY APPROACHES TO PLAYER DEVELOPMENT

DAVID REDWOOD

EARLY SPECIALIZATION IN FOOTBALL

CURRICULUM DESIGN TO SUPPORT PLAYER DEVELOPMENT

WHAT IS EARLY SPECIALIZATION, AND ITS EFFECTS?

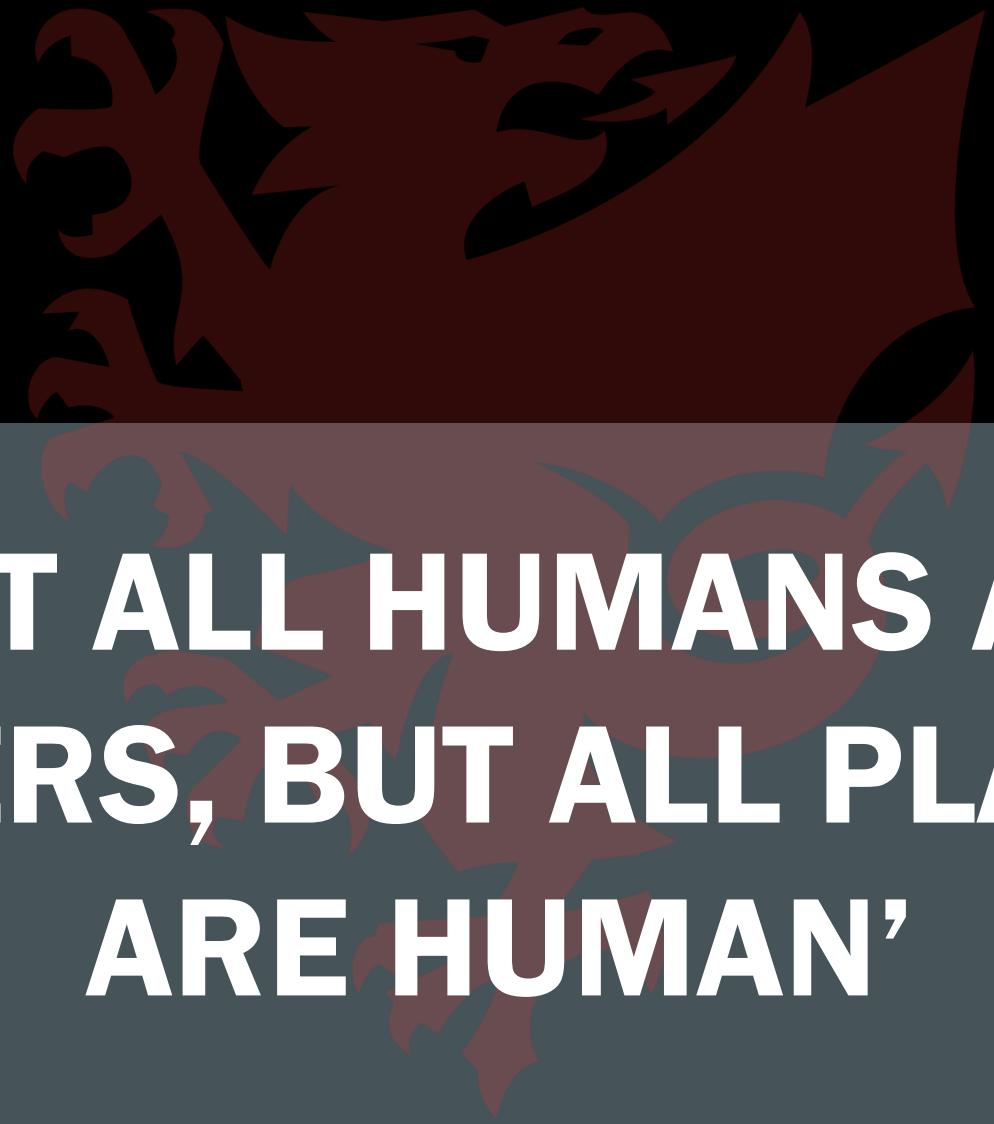
WHY IS THERE SO MUCH PLAYER DROPOUT?

CAN WE LEARN FROM OTHER SPORTS TO IMPLEMENT CHANGE?

Holistic - “characterized by comprehension of the parts of something as intimately interconnected and explicable only by reference to the whole.”

Oxford English Dictionary (1989)

Oxford English Dictionary (1989)



‘NOT ALL HUMANS ARE PLAYERS, BUT ALL PLAYERS ARE HUMAN’

BACKGROUND

“Within the United States, close to 45 million youths between the ages of 6 and 18 participate in some form of organized sports.”

Bean et al (2014)

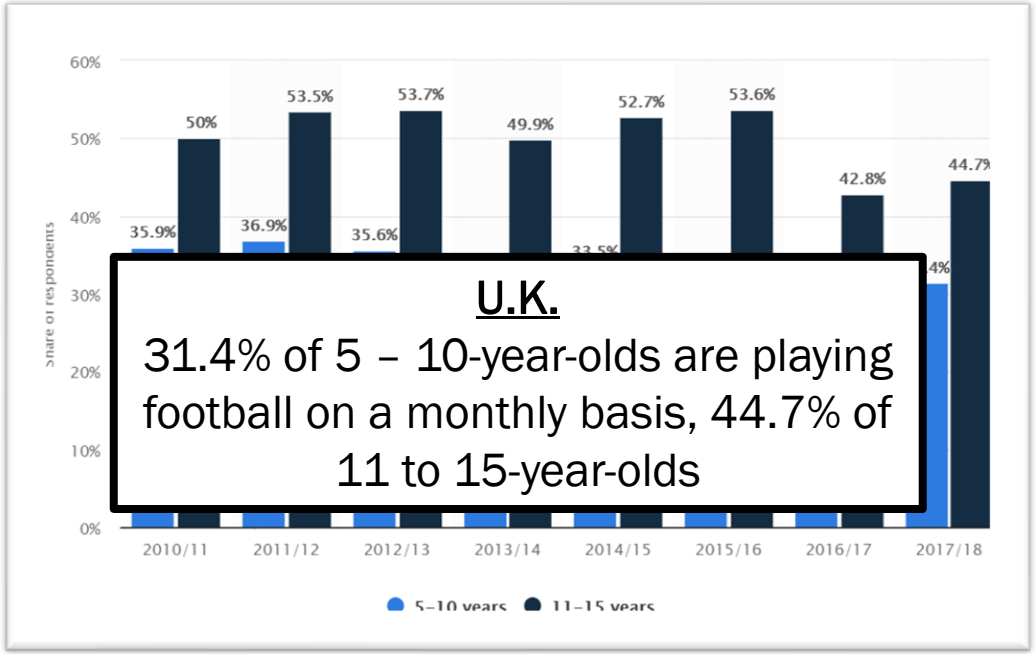
WHY?

- Engage in physical activity so to lead to positive health effects.
- Benefits motor, mental, and social factors.
- Physically active youths tend to become physically active adults.
- Increased cardiovascular and musculoskeletal fitness.
- Gets children away from sitting in front of the T.V.
- Positive effect on body mass and percentage body fat.
- Reduces health problems

Bean et al (2014), Crane and Temple (2015), Mollerlokken et al (2016),

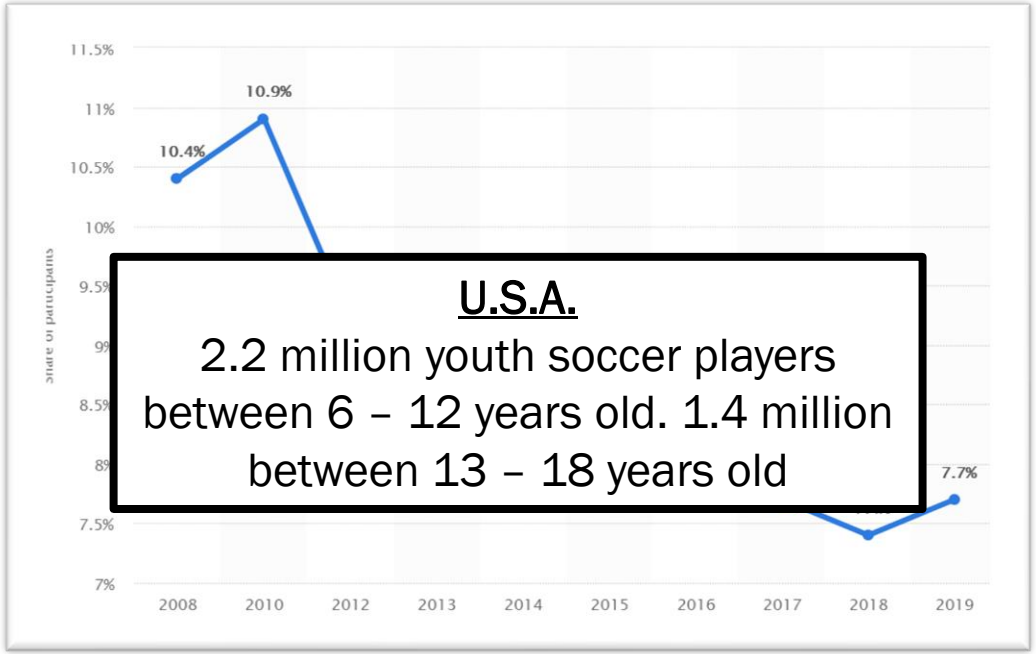
BACKGROUND

- Canada: 77% of youth aged 5–19 participate in organized physical activity or sport.
- USA: 38% of children aged 6–12 participated in sport on a regular basis = 9 million American children participating in sport regularly.
- Australia: 72.3% of children under the age of 15 participated in some type of sport related activity
- England 86.4% of children ages 5–15 were reported to participate in sport in 2018



U.K.

31.4% of 5 – 10-year-olds are playing football on a monthly basis, 44.7% of 11 to 15-year-olds



U.S.A.

2.2 million youth soccer players between 6 – 12 years old. 1.4 million between 13 – 18 years old

Mosher, A. et al (2020), www.statista.com, www.aspeninstitute.org

BACKGROUND

“Forty percent of kids played team sports on a regular basis in 2013. Yet, numerous children and youth, drop out of sports every year as well.”

Witt (2018)

- In just 5 years, dropout rates have increased by 5% (44.5%, 2008, to 40% 2013, participation)
- 23.9% annual dropout rate consistently between 10- to 19-year-old
- One - fourth of youth football players dropout from the sport.
- Accumulative dropout has a significant impact on number of teams available.
- Sport dropout rates by 12- to 13-year-olds is a major concern.

Bean et al (2014), Crane and Temple (2015), Mollerlokken et al (2016), Witt (2018)

EXPERIENCES AND OBSERVATIONS

Experiences

- Players at younger ages, 6 years and older, are being asked to commit to just football. i.e., intense weekly schedules and multiple games over weekends.
- Published league results and tables of 8-year old's and older, to support a promotion/relegation level of play.
- Tournaments of 4 games in a weekend, marketed towards 8-year-olds and older.
- Ranking points awarded nationally to teams for participation in tournaments and weighted towards winning.
- Social media posts weighted towards tournaments and leagues won to market and advertise the club.
- Sideline behaviour of coaches and parents towards players.

EXPERIENCES AND OBSERVATIONS

Observations

- Children do not have time to be able to participate in multiple sports.
- Winning takes a priority over development, as league positions are perceived as a means of promoting successful clubs.
- Huge workload placed on players in a win at all cost environment.
- Success is defined by win records, and participation in ‘elite’ leagues and ‘exclusive’ tournaments.
- Recruitment of players from advertising trophies and medals, to ultimately increase size of club in generating large revenues.
- Players are locked into positions based on their physical effectiveness and lack a willing to be creative or make a mistake out of fearing the outcome of a game.

WHAT IS FUELING THIS BEHAVIOR IN YOUTH FOOTBALL?

EARLY SPORT SPECIALIZATION

The importance and priority placed on one sport, where training becomes year-round, with year-round emphasis on competition, and therefore preventing participation in other sports.

Athletes:
91% believed specialization increased their chances of getting better at their sport.
80% believed specialization increased chances of making their high school team.
66.9% believe specialization increased chances of making a college team.
15.7% believed they were likely to get a college scholarship from athletic performance.

Parents:
“Sensed improved skills in children who started participating earlier”

Livingston, J. et al (2016)

Brenner (2016), Brooks et al. (2018), Jayanthi et al (2015), Livingston et al (2016), Myer et al (2015), Moseid et al (2019)

WHY?

37% of children have ambitions of becoming a college athlete.
33% of children have ambitions of becoming a professional sportsperson.

	High School Participants	NCAA Participants	Overall % HS to NCAA	% HS to NCAA Division I	% HS to NCAA Division II	% HS to NCAA Division III
Men						
Soccer	459,077	25,499	5.6%	1.3%	1.5%	2.7%
Women						
Soccer	394,105	28,310	7.2%	2.4%	1.9%	2.9%

1.9% of college soccer players progress to the professional level

Only 5% of German academy players have a chance of making it to first team professional level.

Jung, V., et al (2012), Padaki, A.S (2017), Wiersma (2000), www.ncaa.com

"Only about two-percent of high school athletes are awarded athletics scholarships to compete in college"

NCAA

"Is it logical or even ethical to promote specialization to the approximately 98% of young athletes who will never reach that status?"

Weirsma (2000)

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EARLY SPORT SPECIALIZATION

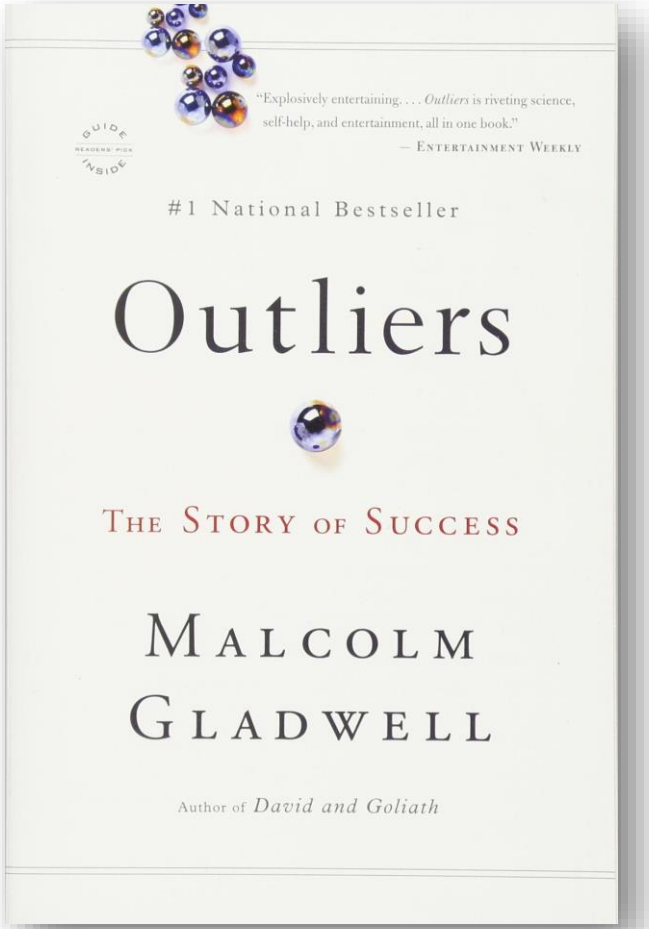
"Sport specialization was thought to affect a relatively small number of elite athletes, but it is now a common practice in youth sport culture."

Bell et al (2019)

"a disturbing cycle in youth sports, with increased competition and pressure at younger ages and lower levels of play becoming more prevalent as the perceived need to specialize and compete year-round to keep up with peers becomes more common at younger ages."

Brooks et al (2018)

Bell et al (2019), Brooks et al (2018)



Ericsson, K.A., et al (1993), Gladwell, M., (2008)

- 10,000 hours was popularized in media, through ‘Outliers’, where deliberate practice was utilized as the primary mechanism for attaining elite performance.

- Youth sports organizations have been quick to promote this approach. However, research into the 10,000-hour rule was outside of sporting context.

- “To maximize sport performance, youth athletes are increasingly being encouraged to specialize in a single sport at the exclusion of other sports.”

Brooks (2018)

As a result, we are now seeing and being driven by:

- Increase in professionalism of youth sports.
- Financial gains from a lucrative youth sports market ($19.2 Billion US Market).
- Media coverage of youth sporting events, and athletes.
- Athletes are now seen as celebrity and people of influence.
- Parent pressure to keep up with and compete with others.

Ericsson, K.A., et al (1993), Gladwell, M., (2008)

DELIBERATE PRACTICE

"Deliberate practice is a highly structured activity, the explicit goal of which is to improve performance."

Ericsson et al (1993)

- Functions as a method to maximize time on one specialized area, over a long-term commitment.
- Leads to exhaustion from high levels of effort, rest must be a consideration.
- Provides no immediate reward to the athlete.
- Lacks intrinsic motivation
- Limited enjoyment through focus on an outcome

Côté et al (2009), Ericsson et al (1993)

DELIBERATE PRACTICE

"Deliberate practice is a highly structured activity, the explicit goal of which is to improve performance."

Ericsson et al (1993)

"quitting all sports to focus on one sport at a young age increased the risk of injury and burnout."

Myer et al (2016)

"sport specialization is not a prerequisite and may even be detrimental to long-term achievement and elite performance"

DiFiori et al (2018)

DiFiori et al (2018), Ericsson et al (1993), Myer et al (2016)

EFFECTIVENESS OF SPECIALIZATION AND DELIBERATE PRACTICE

- A lack of a clear definition as to what early specialization is.
- Suggestion that it is difficult to conclude that it is detrimental to youth athletes.

However, …

We can recognize characteristics of early specialization

- Deliberate practice
- Young introduction to exclusively one sport
- Intense training
- Outcome driven
- Year-round participation

Ultimately, this has resulted in youth sport becoming too serious, overly competitive and adult-driven.

Mosher, A., et al (2020)

WHAT ARE THE CONSEQUENCES?

- **Intrapersonal constraints:** “internal states and attributes that are important in forming the desire to participate in or have a preference for a particular activity.”
- **Interpersonal constraints:** “social factors that affect leisure preferences resulting from interactions with others.”
- **Structural constraints:** “external factors that interfere or disrupt the connection between preferences and participation.”

Crane and Temple (2015)

Intrapersonal Constraints

- Not having fun, bored.
- Negative perception of competence.
- Anxiety and nervousness from criticism.
- Pressure from coaches.
- Intrinsic pressure/stress

Interpersonal Constraints

- Parent pressure.
- Loss of ownership.
- Lack of opportunities to participate in other sports.
- Pressure from peers, and family.

Structural Constraints

- Sports related injuries.
- Burnout.
- Lack of playing time.
- Too structured, lack of free play.
- Financial constraints

“most salient consequence of high-level sport commitment is the possibility an athlete will burn out of sport prior to the time at which peak performance is realized.”

Wiersma (2000)

Crane and Temple (2015), Wiersma (2000), Witt (2018)

WHAT CAN WE LEARN FROM OTHER SPORTS

BASKETBALL
(U.S.A)

RUGBY UNION
(NEW ZEALAND)

ICE HOCKEY
(CANADA)

US Basketball recognized the intensity of youth competition and its negative effects on participation. They assembled leading researchers and experts to provide a solution to the detrimental effects of early specialization.

With enjoyment a distant consideration of participation, with an adult centered approach to winning and competition as priority, the benefits of sport participation had reversed to highlighting the following issues:

- Pressure to begin high-intensity training in childhood.
- Single-sport specialization that occurs prior to adolescence.
- Frequent and multiple competitive event scheduling.
- Increased risk for injury, burnout, and disengagement from health-promoting physical activity both in the short term and the long term.

DiFlori et al (2018)

"Combining personal engagement in sport with early sport sampling promotes a rewarding youth experience and long-term sport success"

Coutinho et al (2016)

Key Recommendations, Utilizing a Developmental Model of Sports Participation:

- Personal Engagement – providing opportunities to connect with others, overall personal development
- Multisport Engagement – delaying early specialization, opportunities to sample other sports
- Varied Methodology – coach led sessions, mixed with peer led play
- Rest – breaks from organized sport and competition to prevent injury and burnout
- Competition Density – scheduling of events to where there are limits on competition
- Injury Prevention Programs – program to aid athletes injury prevention
- Sport Readiness – asses the athlete as an individual to adjust the demands of development

Coutinho et al (2016), DiFlori et al (2018)

Sport NZ, and in collaboration with 5 of its major sporting bodies, including Rugby NZ, identified the number of players dropping from sports as an alarming problem.

“young people play sport to have fun with their friends. If they stop having fun, they stop playing sport. Focusing too early on just one sport, putting winning before skills development and making young people train like professionals – these are the problems, not the solutions.”

NZ Sport (2019)

“There is real momentum behind these changes – a widespread recognition that we need to work hard and work differently to create quality and fun experiences that will keep kids in sport. This is great for participants, future talent and for our sector“

Raelene Castle (CEO of Sport New Zealand)

SPORT NEW ZEALAND
IHI AOTEAROA

- Inclusive positive sports experience for athletes of all levels of ability.
- Improved engagement and education with program leaders, parents, and coaches, to positively influence behavior.
- Supporting organizations in developing age-appropriate competition and player development opportunities.
- Fostering an open mindset to youth development and talent identification throughout teen years, and prioritizing skill development to younger athletes.
- Support and encourage multisport participation in youth athletes
- Provide education in the dangers of overtraining and overloading, leading to sports injury and burnout.

Sport Canada, and Hockey Canada; implementing a Long-Term Development Plan, for ‘Active for Life’ initiative.

- Player development stages to benefit the player.
- Adopting a player-centered, individual development.
- Player development as a long-term process.
- Strong foundation for long term success of Canadian Hockey.
- Align player development with age and ability.
- Coach development and education.
- Improved parent engagement with education on the best practices for player development.

Sport Canada, and Hockey Canada, implementing a Long-Term Development Plan, for ‘Active for Life’ initiative.

“encourages life-long physical activity and informed healthy lifestyle choices with participation in hockey long after the competitive year”

OMHA

- nine-stage model based on the physical, mental, emotional and cognitive development
- Each stage reflects a different point in developing the player.
- Stages 1 – 5 = physical literacy
- **Stages 6 – 9 =** development and competitive excellence.

SUMMARY OF FINDINGS

All 3 sports experienced dropout in youth participation.
All 3 sports made recent changes to the structure and practices of the sports.

Positive changes to address dropout and early specialization

- Holistic approach to youth development, consideration of social and psychological factors.
- Encouragement of multisport participation.
- More time dedicated to peer-led play, and small sided games.
- Management of player overload and competition structures
- Engagement with adults (coaches, parents, leaders) in better development practices
- Education on the dangers of overuse injury and burnout

"hours invested in invasion-type deliberate play was found to be a reliable discriminator of the two skill groups, with expert decision makers accumulating significantly more than their less skilled counterparts."

Berry et al (2008)

LONG TERM DEVELOPMENT PLAN AND DEVELOPMENT MODEL OF SPORTS PARTICIPATION

LTDP

- Provides a framework and structure to long term development.
- Encourages fundamental learning of motor skills and physical literacy.
- Closely aligned to the concept of the '10,000' hour rule.
- Suggest everyone following the plan will become elite.
- Chronological age used as a parameter for stages.
- Lacks research and evidence of effectiveness.

DMSP

- Incorporates performance, participation, and personal development.
- Protects against overuse injuries, burnout, and ultimately dropout from sports.
- Utilizes deliberate play to engage athletes and promote enjoyment.
- The youth athlete is empowered, taking control over their participation.
- Fosters intrinsic motivation through the joy of play and lack of focus on the outcome.

"the LTAD model must be viewed as a work in progress and caution is urged to ensure that the model does not become too enshrined as ''fact''.

Ford et al (2011)

Ford, et al (2011)

LONG TERM DEVELOPMENT PLAN AND DEVELOPMENT MODEL OF SPORTS PARTICIPATION

"The application of LTAD requires behavior change, it is important that this perspective is woven into LTAD approaches."

Jeffreys (2018)

"the risk for young athletes is that a focus on high volume can lead to overuse injuries, physical and mental 'burnout' and dropout, as well as squeezing out time for developing swimmers' technique".

Holt (2010)

"does not take into account the individual timing of growth and maturation"

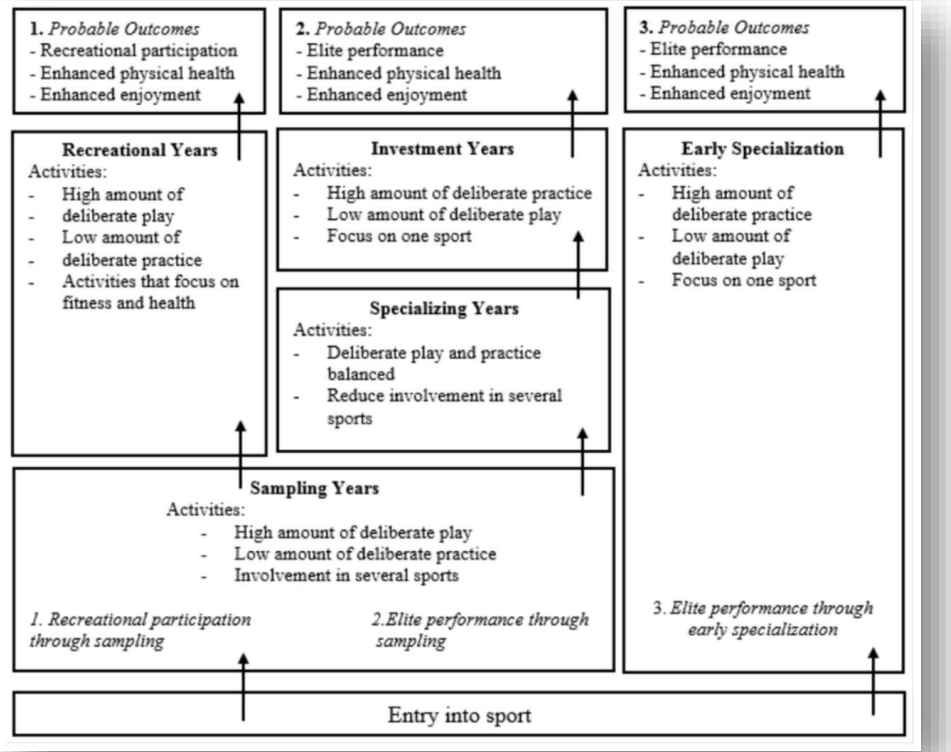
Ford et al (2011)

While Canada Hockey has a clear guideline to the implementation of LTDP, it is still left to the interpretation of the coach. While a framework for development is important, it does not address the issue of early specialization, holistic approaches to athlete development, and ultimately athlete dropout.

Balyi and Hamilton (2014), Ford et al (2011), Holt (2010), Jeffreys (2018)

LONG TERM DEVELOPMENT PLAN AND DEVELOPMENT MODEL OF SPORTS PARTICIPATION

Development Model of Sport Participation.



Pathways One and Two

early sampling serves as the foundation for both elite and recreational sport participation.

1) Involvement in various sports
2) Participation in deliberate play

Pathway Three

Elite performance through early specialization in one sport.

Cote and Wall (2007), Cote et al (2009)

DELIBERATE PLAY

"Sport activities they engaged in during childhood that were inherently enjoyable and differed from organized sport and adult-led practices such as deliberate practice."

Cote (1999)

- Positive effect on the individual's motivation, intrinsically motivated.
- Supports continued participation and commitment to sport.
- Elite performers in adulthood performed more deliberate play then deliberate practice hours.
- Freedom of play allows for creativity and empowers the athlete in decision making.
- Deliberate play in sampling supports motor and cognitive development.

Cote (1999), Cote et al (2016)

DELIBERATE PLAY

Informal games that identify as ‘street games’. Experimentation through play, involving high repetition of actions in differing conditions for great exposure to situational skill performance. Rules and numbers playing vary, peer led or limited adult involvement.

Melina (2010)

Significance of play in world-class German Soccer players:

- Only 14% involved in drill like technical skills or conditioning.
- 86% involved in coach-led play
  - 17% in coach led, conditioned, small sided games
  - 69% kicking around with friends

Krustup et al (2010)

Krustup et al (2010), Melina (2010)

COTE ET AL (2016) EVIDENCE BASED POLICIES FOR YOUTH SPORT

1. Early diversification (sampling) does not hinder elite sport participation
2. Early diversification (sampling) is linked to a longer sport career and has positive implications for long-term sport involvement.
3. Early diversification (sampling) allows participation in a range of contexts that most favorably affects positive youth development.
4. High amounts of deliberate play during the sampling years build a solid foundation of intrinsic motivation.
5. A high amount of deliberate play during the sampling years establishes a range of motor and cognitive experiences that children can ultimately bring to their principal sport of interest.
6. Children should have the opportunity to either choose to specialize in their favorite sport or to continue in sport at a recreational level.
7. Late adolescents (around age 16) have developed the physical, cognitive, social, emotional, and motor skills needed to invest their effort into highly specialized training in one sport.

Cote et al (2016)

HOW CAN WE INFLUENCE CHANGE?

Football is incredibly popular around the world in youth participation. However, a consistent 25% dropout rate throughout the ages, significantly reducing opportunities.

"90% of all players drop out of soccer between the ages of 10 and 19 years, with the consequence that approximately 60% of the original football teams disappear between the ages of 15 and 19 years due to the loss of players."

Mollerlokken, (2013).

Early sports specialization has become common practice in youth sports, while only 2% of participants will reach elite levels.

"Multiple investigations have demonstrated the detrimental sequelae of early specialization, including burnout, overuse injury, and decreased enjoyment"

Pedaki et al (2017)

Dropout rates are attributed to a lack of fun, drop in motivation, pressures to perform in a win at all cost environment, constraints on social events, and through perceived lack of ability to perform.

"having fun is the primary reason that children participate in sports and that loss of enjoyment can lead to sport dropout."

Brooks et al (2018)

US Basketball and Rugby NZ have made commitments to addressing dropout rates in their sports.

"Combining personal engagement in sport with early sport sampling promotes a rewarding youth experience and long-term sport success"

Coutinho et al (2016)

Implementing DMSP meant serious concerns of player dropout rates could be addressed through structural changes, and more holistic approaches to player development.

"young people play sport to have fun with their friends. If they stop having fun, they stop playing sport. Focusing too early on just one sport, putting winning before skills development and making young people train like professionals – these are the problems, not the solutions."

NZ Sport (2019)

Curriculum design which allows for sampling, and methodology that supports more deliberate play, can address the reason for dropout, and support longer participation in football, positively effecting elite performance in adulthood.

"several studies suggests that elite athletes who experience a diversified sport background can still reach an elite level of performance… deliberate play will have a positive effect over time on an individual's overall motivation… is an important determinant of continued participation and commitment to sport."

Cote et al (2016)

THOUGHTS FOR FUTURE CHANGE IN CURRICULUM AND SESSION DESIGN

CONSIDERATION TO PREVENT DROPOUT FROM YOUTH SOCCER AND SUPPORT HOLISTIC PLAYER DEVELOPMENT

Curriculum design to implement deliberate play, program structure to provide multiple sporting options in sampling multiple sports. (early Sampling Years)

A healthy balance between deliberate play and deliberate practice, adjusting coaching behaviors to support individual development through empowering players, and supporting process and performance goals over outcome. (later Specializing Years)

Provide engagement and education with coaches, program leaders, and parents along the development pathway, influencing the mindset of the parent on the importance of the 3 P's. (Performance, Participation, and Personal Development)

Empowering the athlete to take control over their sports experience.

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