LONG-TERM ATHLETE DEVELOPMENT

JOIN THE MOVEMENT

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Cricket BC
Long-Term Athlete Development
July 2014

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THE LTCD PROJECTLEADER'S LETTER

With great pleasure, the Cricket BC workgroup presents its Long-Term Cricket Development (LTCD) model for Canadian cricket. The program gives all parties concerned a blueprint for cricket players' growth from amateur to professional levels. Sport Canada is collaborating with Cricket BC on this really important innovation.

Since the LTCD document's contents are founded on the most recent scientific research and industry best practices, it will have a significant impact on how development programs are carried out and alter the future of the game on a national level. By creating a new culture, it will alter practice and preparation habits. Additionally, it will raise the bar for our competitions in every province by fostering an excellence-driven mindset.

Since the numerous conventional approaches to cricket development in Canada have not yielded the desired outcomes and have instead resulted in lower participation rates, subpar performance, and injuries, LTCD was created. Maintaining participation levels, improving outcomes, and shielding our athletes from injury and burnout are all made possible by the LTCD strategy.

In addition to promoting lifetime involvement, we think that putting the ideas in this document into practice can help cricket players succeed both domestically and abroad. To ensure the success of our sport, all Provincial Associations and game stakeholders will collaborate.

Ingleton Liburd
Chair, LTCD Steering Committee

THE PRESIDENT OF CRICKET BC'S MESSAGE

In order to accomplish the objectives of increased participation, excellence, capacity, and interaction in sport, the Canadian Sport Policy approach to shared leadership and cooperation amongst all stakeholders is reflected in the Long Term Athlete Development (LTAD) model.

In order to meet its mission of guiding athletes to world-class outcomes, Cricket BC has developed its own model, "Long Term Cricket Development," which takes into account the distinctive characteristics of Canada's sport system and culture. We have created a genuinely competitive program using the LTAD framework, whose creation and application are essential to cultivating the culture of excellence required to propel Cricket BC and its players to the greatest heights. We will now put more emphasis on the long-term viability of sport and the advancement of our sport at all levels than on the immediate requirements of players.

In addition to giving all Canadians the chance to participate in one of the country's oldest sports, this Long Term Cricket Development document introduces the tasks and challenges that Cricket BC and its member associations will face in creating a culture of excellence at the highest levels of competition. I want to express my gratitude to Sport Canada and all of the people that put in a lot of effort to create this publication.

Arvinder Khosa
President, Cricket BC

ACKNOWLEDGEMENTS

Cricket BC would like to thank its working group, which included former Women's Coordinator Shelley Boardman, Project Leader Ingleton Liburd, Coaching Coordinator Ron Dipchand, and former National Coach Pubudu Dassayanke, for their contributions to our Long Term Cricket Development paper. We also want to express our gratitude to Colin Higgs and Istvan Balyi, our knowledgeable advisors, for their advice during this project. In order for us to release this paper, Cricket BC also thanks all of the Provincial Associations, coaches, and volunteers for reviewing it and providing feedback.

WHAT IS LONG-TERM ATHLETE DEVELOPMENT (LTAD)?

The foundation of the LTAD model is the notion that while creating a training, competition, and rehabilitation program, each participant's stage of physiological, mental/cognitive, and emotional development must be determined and taken into consideration.

The LTAD model is inclusive, meaning that individuals of all ages and abilities can benefit equally from its guiding principles, whether they are engaged in recreational physical activity or competitive sports.

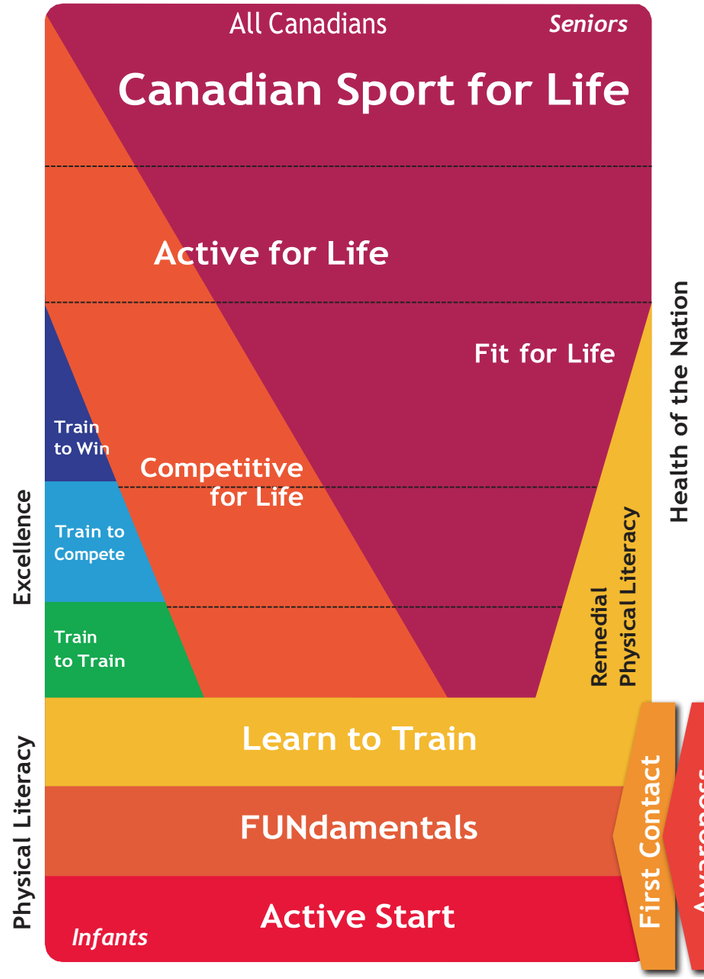
This model is an example of a paradigm shift, a philosophically distinct approach to physical activity and sport.The model and its potential to improve our pleasure of sports and physical activity will be explained in this document.

Physical literacy is one of the objectives of the LTAD model, which also aims to synchronize and integrate the entire sport system. The ability to grasp basic movement and sport skills is known as physical literacy. A person who is physically literate is able to read every part of their physical surroundings and moves with grace, economy, and confidence in a wide range of physically demanding settings. He or she foresees the requirements or opportunities for mobility and reacts intelligently and creatively. Whitehead (2001)

Ten important factors that impact the LTAD model and distinguish it from other long-term development models have been identified in order to better understand the model and its function in assisting participants in achieving these goals. Later sections provide an outline of these elements.

LTCD is the application of Long-Term Athlete Development in Cricket.

FIGURE 1.



The Active Start, Fundamentals and Learn to Train stages of LTAD emphasize Physical Literacy. The Train to Train, Train to Compete and Train to Win stages focus on excellence, while the transition to the Active for Life stage can be made at any time, encouraging life long participation in physical activity and/or sport.
The Awareness and First Contact refer specifically to disability sports but cricket needs to increase the overall awareness of the game and ensure that players' first contact with the sport is a positive experience.

WHERE ARE WE NOW?

Cricket faces a few issues that, if left unchecked, could prevent players from realizing their full potential. We need to figure out how to include the Cricket BC Schools Program into the community's grassroots initiatives. It is necessary to address issues like financing, communication, and attracting and keeping talented players.

Enhancing coaching is necessary, and all coaches—whether paid or unpaid—must be acknowledged. The coaching programs for adults and children are now the same, and they ought to be updated to take into account the clear distinctions between the two groups.

Selection, organizational structure, competitive structure, and the problem of undertraining and over competing are further areas that require attention and improvement. A clear policy regarding support for women's cricket must also exist.

WHERE ARE WE GOING?

The goal of Cricket BC is to become a full member of the International Cricket Council. Establishing a national academy system by the end of 2013 is also crucial. Eighty percent of both men's and women's national team players are predicted to have graduated from the academy system by 2016.

Cricket BC will establish enduring connections with educational institutions, camps, youth centers, and other establishments. In addition to starting female leagues in every province that will culminate in a provincial championship, we will also construct a high school and university championship.

To place in the top twenty, our players must increase their output and develop into more reliable run scorers and wicket takers.

ICC associates rankings for bowling and batting. This should eventually result in inclusion in the ICC full ranking.

By 2013, the National Coaching Certification Program (NCCP), Long-Term Athlete Development, and Long-Term Coaching Development should all be in line with one another. There should be coaching coordinators in every province. Establishing Long Term Official Development is necessary.

Schools, colleges, clubs, leagues, provinces, and the country as a whole should all have a formalized system of competition by 2016.

HOW ARE WE GOING TO GET THERE?

According to Long-Term Athlete Development theory, a player must train and practice for 8–12 years before reaching the elite level (Bloom, 1985; Ericsson et al., 1993; Ericsson and Charness 1994). Success is achieved through the acquisition of fundamental skills along with extensive long-term training, practice, and competition rather than concentrating only on short-term success. When it comes to player preparation, there is no shortcut to success!

In addition to offering a logical defense for improving our current system, the LTCD model offers several potential remedies to address the previously noted flaws. Planning for the future and seeing beyond the immediate future are essential components of effective talent development. This presents a significant obstacle for our sport.

Our current frameworks are always being improved, and teaching those involved is a difficult undertaking. However, in order to guarantee that the system is advantageous to all parties, we will determine the most efficient method of implementing the change and have a suitable communication pathway plan in place.

THE TEN KEY FACTORS INFLUENCING LTAD

1. The Fundamentals
- Developing Physical Literacy

Children must first master a variety of language abilities, including reading, writing, grammar, spelling, and composition, before they can be deemed literate. Similar to this, children must learn basic movement abilities—such as sprinting, throwing, catching, hopping, leaping, etc.—as well as basic athletic skills in order to become physically literate. Before learning more complex sport-specific abilities and techniques, children should first master the fundamental movement and sport skills, according to growth and development literature. These foundational abilities ought to be learned before adolescence, when the growth spurt begins.

To participate in and appreciate sports, one must be physically literate. Swimming, gymnastics, and athletics are three sports that are especially beneficial for honing basic movement and athletic skills.

Athletics: Running, jumping, and throwing are just a few of the basic movement abilities that are developed in athletics and are essential to all other sports.

Gymnastics: Along with the basic movement patterns of landing, statics, locomotion, rotation, swings, springs, and object manipulation, gymnastics promotes the development of agility, balance, coordination, and speed.

Swimming: The basis for all water sports is swimming. In addition to teaching coordination and balance in a buoyant environment, it is crucial for water safety.

2. Developmental Age

The LTCD is influenced by a second factor, which was mentioned previously. It is the understanding that developmental age and chronological age are not the same. The number of years and days that have passed since birth is referred to as chronological age. The term "developmental age" describes a child's place on a continuum that starts at birth and ends when they reach complete physical maturity.

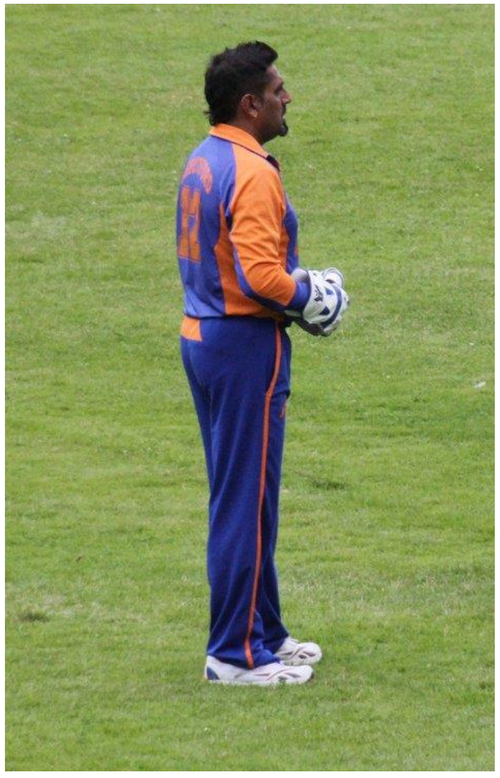
When different facets of sport and physical activity should be introduced or emphasized depends on the developmental stage of the player. The LTCD methodology determines an athlete's developmental age using the "early," "average," or "late" maturers categories. These labels assist coaches and teachers in creating training, competition, and instruction plans that suit the player's developmental stage. It is easy to determine an athlete's developmental stage. For more instructions on "how to," see www.ltad.ca. The Role of Monitoring Growth in LTAD).

Players experience increased response to training during a number of time-sensitive times as they get older. The model recognizes these times and maximizes their usage in the development of skills and fitness.

3. Mental, Cognitive and Emotional Development

Teachers and coaches need to understand that people develop at different rates and that each athlete has a unique schedule for their physical, mental, motor, and emotional growth. When instructing and training athletes, instructors and coaches are urged to adopt a comprehensive approach. This entails considering a wide range of psycho-social and emotional elements that affect the athlete on a daily basis.

Long-term participant development must give priority to cognitive, mental, and emotional (affective) components since they have a big impact on a player's performance. In addition to these components, coaches and instructors should take into account environmental and equipment aspects that affect safety, performance, and participation. All phases of long-term participant development should foster ethics, such as fair play, respect for oneself and others, and tenacity. Refer to Appendix One.



4. Expertise

Many of the most accomplished athletes in the world engaged in a wide range of sports and physical activities during their childhood. They have achieved great athletic success thanks to the movement and sport skills they acquired as a result. Youngsters benefit from getting involved in a range of sports from an early age. Some of the physical and movement skills that are essential for later involvement success will be developed by early exposure to a wide range of sports and physical activities. These consist of eye-hand-foot coordination, agility, balance, conditioning, speed, strength in the core of the body, endurance, and suppleness.

Sports fall into one of two categories: early or late specialization. Sports like gymnastics, rhythmic gymnastics, diving, figure skating, swimming, and table tennis are examples of early specialization sports, where success requires early specialized training. I am not sure if they are early specialization sports because the world winners usually have mid-20s ages. Sports that do not require early specialization to attain brilliance are referred to as late specialization sports. Cricket, athletics, soccer, rugby, volleyball, combat sports, and racquet sports are some of these sports. Understanding the differences between early and late specialization is crucial. The sport of cricket is a late specialization. In a sport with late specialization, early specialization may lead to: • An excessive focus on sport-specific or one-sided preparation.

- The development of basic movement and sport skills is lacking.
- Lack of development of fundamental movement and fundamental sport skills.
- Injuries from overuse.
- Early burnout.
- Early retirement from competition and training.

4. Sensitive Periods

The body's susceptibility to training stimuli at various phases of development and maturation is referred to as trainability during the sensitive times of accelerated adaptation to training. Although athletes can train their physiological systems at any age, there are certain sensitive times when people respond particularly well to particular training regimens. The Five Ss of training and performance provide the best assessment of trainability:

- Endurance (strength), strength, speed, skill, and flexibility (supply)

Biological markers1 (Balyi, 2001) such as the onset of Peak Height Velocity (PHV, or the adolescent growth spurt), PHV itself (the actual peak after growth decelerates), and the onset of menarche are used to identify the "sensitive periods of accelerated adaptation to training" for stamina, strength, and skills. The trainability of stamina, strength, and skill is based on developmental age as established by biological markers, while the trainability of speed and suppleness is based on chronological age2. Therefore, the "windows of optimal trainability for faster adaptation to training" are determined using the biological markers.

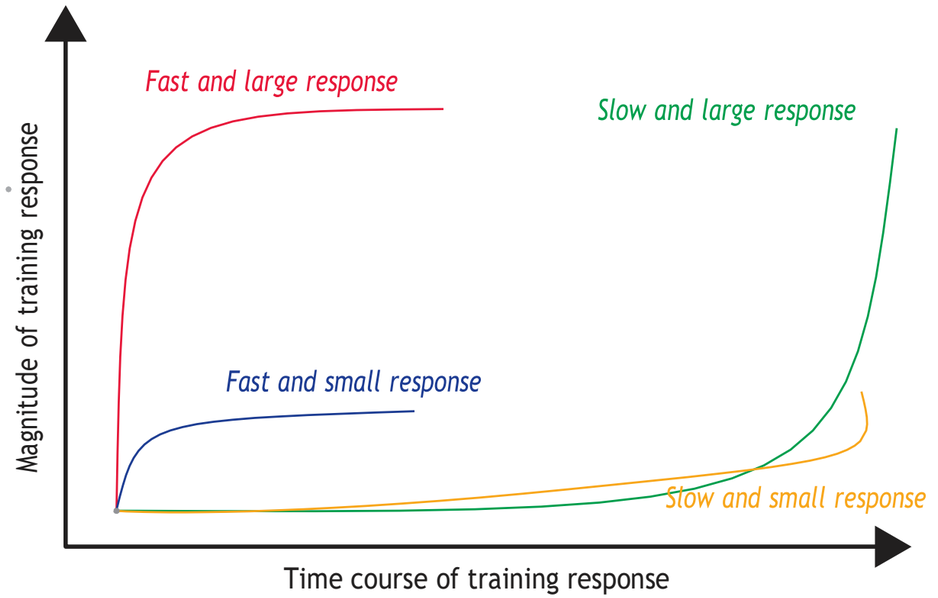
1 Balyi, 2001.

2 Age is the basis for all known studies.

3 Coaching and research literature, such as Arbeit (1997), Borms (1985), Kobayashi et al. (1978), Malina, Bouchard and Bar-Or (2005), Rowland (2005), Rushall (1998), Viru (1995), and Viru et al. (1998 and 1999), have extensively documented trainability. However, because the sources were published in coaching magazines rather of peer-reviewed scientific journals, several experts have questioned the validity of Long-Term Athlete Development and the "windows of trainability."In actuality, coaching has always been both an art and a science, and even in cases where there is little research on particular theories and practices, we still need to base our decisions on the best information at our disposal. Trainability and fast adaptation to training are notions that are still used in the Long-Term Athlete Development model because they are supported by reasonable data. Supporters of the concept encourage constructive criticism and new knowledge as it becomes available since Kaizen, or the dedication to continual improvement, is a fundamental principle of long-term athlete development.

FIGURE 2. - VARIATION IN TRAINABILITY

(ADAPTED FROM WORK BY BOUCHARD ET. AL., 1997)



Adapted from work by Bouchard et al., 1997. Balyi,I.,Way,R., Norris, S., Cardinal, C.& Higgs,C. (2005).Canadian sport for life: Long-termathletedevelopmentresourcepaper.Vancouver,BC:CanadianSportCentres.

Figure 2 illustrates the evidence to date that supports the fact that there is a high degree of variation in the trainability of humans (athletes), both from the standpoint of the magnitude of change and the time of response to a given stimulus. This most likely represents human variation and the "elasticity" of response to different stimuli, which are primarily determined by the underlying genetic matrix and reinforced by the environment in which a person lives (Norris & Smith, 2002).
See The Ten Ss of Training and Performance for further information.

5. Periodization
(Annual training, competition and recovery plan)

In order to attain peak performance at the necessary time, periodization offers the structure for arranging training, competition, and recuperation into a rational and scientifically grounded timetable. For every step of cricket's LTCD, a periodized annual plan that considers growth, maturation, and trainability principles should be created.

To put it simply, time management is the process of creating a periodized annual plan. To achieve the intended training and competition goals, this entails organizing the appropriate activities at the appropriate level of difficulty in the appropriate order.

The strategy can be divided into manageable chunks. The way these units should be sequenced is essential to achievement. The training units should be arranged as follows in order to achieve peak performance in a competitive setting:

- Enhance the player's ability to perform, including mental and physical literacy as well as sport-specific abilities, tactics, and strategies.
- Create a sophisticated and harmonious blend by integrating the performance parameters.
- Get the athlete ready for competitions.

The coach must have the following information in order to create an annual plan:

- How the athletic form unique to a sport is created.
- The sport's specifications (demands) during competition.
- The sport's requirements during the training stage.
- The schedule of competitions and the relative significance or goal of each one.
- The athlete's current level of training at the beginning of the annual plan.
- The athlete and coach must deal with the contextual reality.
- The long-term athlete development principles.

Training, competition, and rehabilitation must be precisely and efficiently planned in order to create a blueprint for success.

6. Calendar Planning for Competition

Cricket's domestic competition and event schedule needs to complement and be in line with LTCD. Requirements for the kind, frequency, and intensity of competition vary depending on developmental stages and participation levels. At certain phases of development, contests and immediate success are subordinated to training and progress. In order to perform well at international and other high-level events, participants must experience a range of competitive situations in the later stages.

Calendars for national and international competitions and events must be planned, and contests must be chosen based on the participants' individual developmental stages.

7. Excellence Takes Time

According to research, professional performers in any subject must practice for at least ten years, frequently referred to as 10,000 hours, in order to achieve elite levels (Ericsson et al. 2007). According to data from the sports industry, it takes at least 12 years of preparation for top athletes to achieve their levels of proficiency (U.S. Olympic Committee, 2002).The fundamental lesson remains the same: perfection cannot be attained by taking short cuts. Elite participants will need at least ten years of practice to reach worldwide status, as participant growth is a long-term process (Gibbons, 2002).The findings show that the average age at which U.S. Olympians start participating in sports is 12.0 for men and 11.5 for women.

- The majority of Olympians stated that it took them 12 to 13 years to perfect their skills from the start of their sport to joining an Olympic squad.
- Olympic medalists were younger — 1.3 to 3.6 years — during the first 5 phases of development than non-medalists, suggesting that medalists were receiving motor skill development and training at an earlier age. However, in late-specialization sports, care must be made to avoid falling into the trap of early specialization.

Short-term performance objectives must never be permitted to compromise long-term athlete development as part of this process (Viru, 1995).

7. System Alignment and Integration

Physical education, school sports, leisure activities, and competitive sports are all interrelated, according to LTCD. Physical literacy and fitness are the cornerstones of both attaining athletic greatness and enjoying a lifetime of physical exercise.

Participants, teachers, coaches, parents, administrators, spectators, sponsors, and auxiliary national and multisport organizations are all considered stakeholders in LTCD. System alignment and integration present a significant difficulty because of the large number of parties involved.

It is important that all components of the cricket community – players, coaches, parents, administrators, spectators, sponsors, and supporting national, provincial, territorial and multi-sport organizations work together to implement the right programs and establish a system that produces optimal conditions for training and competition.

The school system (physical education and school sports), leisure departments, competitive sports, sports facilities, and coaching organizations should all be a component of Canada's sports system. Every aspect of the sports community needs to be coordinated and connected.System integration and alignment provide significant hurdles because there are several partners spread throughout a large country with varying demographic makeup. Every component of the system is essential to player growth.The system needs to be transparent, easy to use, and founded on a set of guiding principles.

8. Continuous Improvement (Kaizen)

LTCD is a dynamic framework that necessitates ongoing modifications based on fundamental ideas.

Constant observation, assessment, and modification guarantee that:

- LTCD reflects the most recent research in all of its facets and responds and reacts to new scientific and sport-specific innovations and observations.
- In order to guarantee the methodical and rational delivery of programs to all ages, LTCD, as a constantly changing vehicle for change, takes into account all new aspects of physical education, sport, and recreation.
- LTCD encourages the integration of sport, physical education, recreation, health, and education. It also works to raise awareness among all partners about the connections between physical education, school sport, community recreation, lifelong physical activity, and high performance sport.

THE TEN S's OF TRAINING AND PERFORMANCE

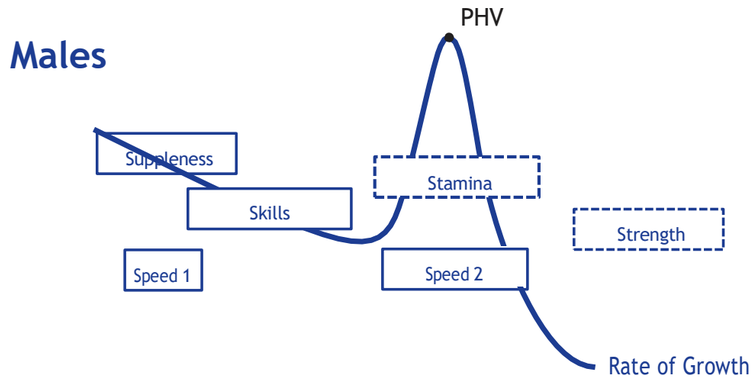
In the paper "Canadian Sport for Life: Long-term Athlete Development," the original Five S's of Training and Performance—strength, speed, strength, skill, and suppleness—were originally presented. Over the course of a player's lifetime, each of the Five Ss can be trained. The Five Ss should be practiced in tandem with each player's stage of development. Players will benefit the most. Professional trainers schedule workouts around particular windows of trainability—also known as sensitive periods—in the body and mind. The phrase denotes times of rapid adaption.

"The windows of accelerated adaptation to training are referred to as the sensitive periods in trainability."

Because each player's genetic composition is different, the timing of sensitive periods differs from person to person. Scientific research indicates that humans vary significantly in the amplitude and tempo of their response to various training stimuli across all stages, even though sensitive periods correspond to the broad stages of human growth and maturity. By the age of eleven, some players have the potential to be exceptional, while others do not start to show promise until they are fifteen or sixteen. In order to prevent players that react slowly to training stimuli from being underdeveloped, a long-term approach to athlete/player development is required.

Age under 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20+

FIGURE 4.



Stamina (Endurance)

The beginning of PHV is the crucial time for training stamina. Players should put more of an emphasis on aerobic capacity training (continuous or aerobic interval workloads) as they reach PHV. They should be gradually exposed to aerobic power training (anaerobic interval workloads) as their growth rate slows.

A key component of cricket training and performance is endurance. Cricket matches are long, thus endurance is necessary. Recovery from daily training and in between competitions depends heavily on stamina.

A reminder: The windows of trainability are partially open outside of the sensitive times and entirely open during the sensitive periods of increased response to training.

Strength

Girls are trainable for strength during two sensitive periods: right after PHV and right after menarche. Boys have a single window of strength that starts 12 to 18 months after PHV. Another crucial element in cricket training and competition is strength. Strength requirements are determined by position-specific requirements.

Reminder: The windows are partially open outside of the sensitive times and entirely open during the sensitive times of accelerated training adaptation.

Speed

For speed, there are two crucial trainability windows. The first speed window for girls is from six to eight years old, and the second is from eleven to thirteen. The first speed window for boys is from seven to nine years old, while the second window is from thirteen to sixteen. Training should concentrate on improving agility and quickness during the first speed window (intervals lasting less than five seconds); the anaerobic and lactic power energy system should be developed during the second speed window (intervals lasting 10-15 seconds).

It is strongly advised that speed be regularly and frequently trained. For instance, as part of the warm-up for every training session, speed training can be done. Since players are fresh and not yet experiencing any central nervous system or metabolic fatigue, it is best to conduct speed training near the end of the warm-up or right after. Speed training should have a modest volume and allow for complete recovery in between sets and exercises.

Outside of the window of ideal speed trainability, short acceleration with good posture, elbow and knee drive, take-off speed, and segmental speed should be routinely practiced. Additionally, during the periodized annual training, competition, and recovery cycle, appropriate training blocks should be allotted for speed training in accordance with the demands of the sport and the seasons.

Reminder: The windows are fully open during the crucial periods of increased adaptation to training and partially open outside of the sensitive periods.

Skill

For the best skill training, both boys and girls have a single window of trainability. Boys experience this window between the ages of nine and twelve, or more specifically, prior to the commencement of the growth spurt, whereas girls experience it between the ages of eight and eleven. Young athletes should be learning physical literacy during this delicate time. The development of basic movement and sports abilities that enable a kid to move with assurance and control in a variety of physical activity and sporting contexts is a component of physical literacy. In an active situation, it also enables kids to interpret what is happening around them and respond appropriately to those events. Both high performance participation and lifetime engagement in physical activity are predicated on physical literacy.

Reminder: The windows are partially open outside of the sensitive times and entirely open during the sensitive times of accelerated training adaptation.

Suppleness

Both girls and boys go through a sensitive stage of trainability for suppleness between the ages of six and ten. However, because of the rapid growth of bones, which puts strain on muscles, ligaments, and tendons, flexibility should also receive extra attention during the growth spurt.

Reminder: The windows are partially open outside of the sensitive times and entirely open during the sensitive times of accelerated training adaptation.

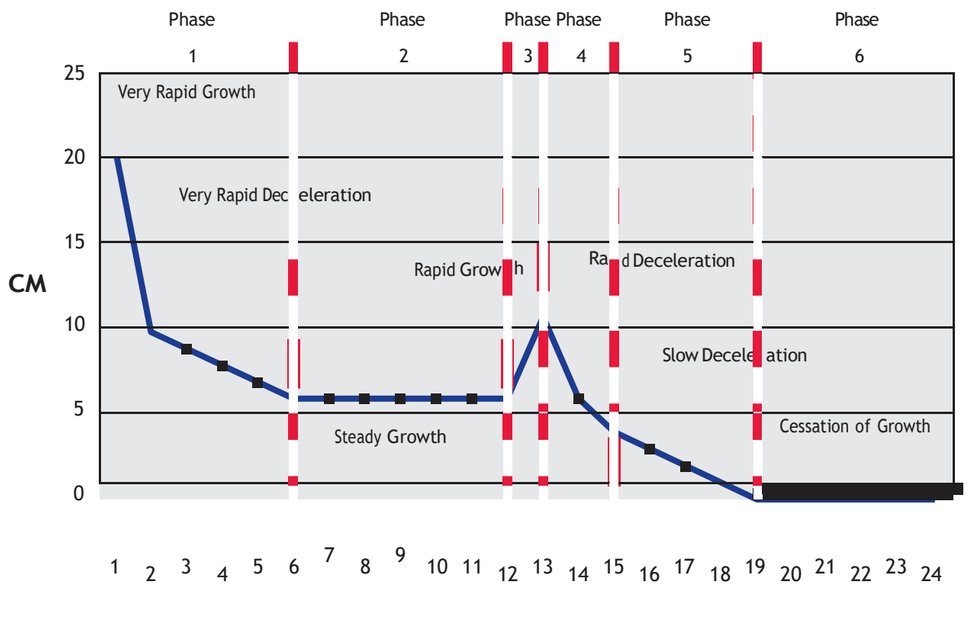
To promote a healthy lifestyle and develop a comprehensive training, competition, and recuperation program, five more S's have been added. These consist of sociocultural elements, schooling, sustenance, (p)psychology, and structure/stature.

Structure / Stature

The six stages of growth and development are covered in this component, which is connected to the windows of ideal trainability: Phase one is characterized by extremely quick growth and deceleration; Phase two is characterized by stable growth; Phase three is characterized by rapid growth; Phase four is characterized by rapid deceleration; Phase five is characterized by sluggish deceleration; and Phase six is characterized by cessation of growth. In order to determine the windows of optimal trainability and the sensitive periods for the development of the Five Ss, height is referred to as "stature." Parents and coaches can recognize the onset of PHV and then pinpoint the critical times for strength, stamina, and skill development by taking regular measurements of a player's height before, throughout, and after maturation. Diagnostics to identify individually relevant sensitive periods of accelerated adaptation to training are essential to the design and implementation optimal training, competition and recovery programs.

FIGURE 5. - THE SIX PHASES OF GROWTH

(ADAPTED FROM 'THE ROLE OF MONITORING GROWTH IN LTAD')



Phase 1:
Chronological age 0 to 6
(Active Start Stage in LTCD)

Rapid growth during infancy and rapid deceleration after age two are characteristics of this phase. It is advised that weight and standing height measurements be taken on each birthday.

Phase 2:
Age 6 to the onset of the growth spurt
(Fundamental and Learn to Train Stage in LTCD)

Growth is steady during this phase, averaging 5–6 cm annually. It is advised that measurements of arm spread, sitting height, and standing height be taken on each birthday. The start of the annual training season should be the date of the first measurement of the year if it is done at a club. Measurements of arm spread, sitting height, and standing height should be made every three months after the onset of PHV has been determined.

The commencement of PHV and the second sensitive period for speed by chronological age should be used to identify the aerobic capacity window during this phase (Balyi & Ross, 2009a; Balyi & Ross, 2009b; Stafford, 2005).

By chronological age, the sensitive times for skill, speed, and suppleness should be determined throughout this phase.

Phase 3:
From the onset of GS to PHV
(Train to Train Stage in LTCD)

Rapid growth is a defining feature of this phase. According to Tanner (1989), the average growth for boys during the first year of the spurt is 7 cm, followed by around 9 cm in the second year, and roughly 6 and 8 cm for girls. To track which body component is growing the fastest, it is advised that measures of standing height, sitting height, and arm span be taken every three months. The coach will be better able to comprehend the reasons behind the changes in athletic performance thanks to the changes in arm span, leg length, and center of gravity. For instance, a player's or athlete's quick growth may cause them to lose their speed and coordination.

Phase 4:
From PHV to slow deceleration
(Train to Train Stage in LTCD)

Approximately 7 cm for boys and 6 cm for girls in the first year following the peak and 3 cm in the following year are the growth rates that slow down during this phase (Tanner, 1989). To track deceleration, it is advised to measure arm spread, sitting height, and standing height every three months.

As previously mentioned, the sensitive time for strength and aerobic power should be determined during this phase. PHV should be followed with aerobic power training. Strength training can be given priority for females either before the start of menarche or just after PHV.

According to Ross and Marfell-Jones (1991), Beunen and Thomis (2000), and Anderson and Bernhardt (1998), strength training should be a top emphasis for males 12 to 18 months following PHV.

Phase 5:
From slow deceleration of growth to cessation of growth
(Train to Compete Stage in LTCD)

One or two years following PHV, the player's growth will gradually slow down and continue to do so until they reach adulthood. Tanner (1989).

It is advised that diagnostics be used to gradually determine training loads and intensities. Testing will determine the priorities for team and individual training now that all systems are completely trainable.

Phase 6:
Cessation of growth
(Train to Win Stage in LTCD)

It is advised that training loads and intensities be determined during this phase based on the athlete's or player's individual diagnostics of strengths and weaknesses.

In conclusion, the coach should be able to maximize training for the pubescent athlete and take advantage of the sensitive periods of accelerated adaptation training thanks to the biological markers of PHV onset, PHV, and menarche onset tracked by the measurements described.

(p)Sychology

There are mental and physical challenges in sports. Psychological abilities that are beneficial in both sports and daily life include the capacity to focus intently, stay calm, and have the self-assurance to achieve. Training regimens should focus on the essential mental talents that sport psychologists have identified because athletic performance depends on the mastery of a variety of psychological abilities. These consist of focus, self-assurance, drive, and managing stress. Each LTCD state will have a different psychological training focus. The goal of the first two stages of LTCD is to help participants learn fundamental psychological abilities including respecting opponents and having fun. Later on, players are taught skills including self-awareness, goal-setting, relaxation, visualization methods, and positive self-talk. After that, these abilities are put to the test in progressively challenging competitive settings. In the end, podium performances are significantly impacted by the preparation, application, and improvement of mental methods for elite competition. At every stage of LTCD, a psychological training program is essential.

Sustenance

The phrase "sustenance" refers to a wide range of subjects, with the main idea being the renewal of the body and mind. Nutrition, hydration, rest, sleep, and regeneration are all components of sustenance. Plans for LTCD training should cover each of these topics. As the player advances through the LTCD levels, the topics covered and the substance of the training's sustenance component will shift. Sustenance emphasizes how important it is for athletes to have the best possible recovery management. The notion of recuperation Management understands that enabling enough recuperation following practice and competition is essential to achieving good athletic performance. It is a "24/7" model that gives the player's activities off the field of play a lot of weight.

Another component of managing sustenance and recuperation is fatigue. Cricket coaches and parents need to keep a close eye on player weariness. Metabolic, neurological, psychological, environmental, and travel tiredness are just a few of the various forms of fatigue. Burnout can result from excessive exercise or competition, but it can also happen when nutrition is neglected.

Schooling

The needs of school must be taken into account while creating training plans for young athletes who are enrolled in classes. This entails coordinating the cricket training annual plan with the academic loads, responsibilities, school-related stressors, and exam dates. Overstress needs to be closely watched. Everyday stressors including school, tests, peer pressure, family, and romantic relationships, as well as increased training volume and intensity, are all considered forms of overstress.

Training camps and competition tours should, whenever feasible, coincide with significant academic events, such as exams, school tests, or holidays, rather than clash with them. It is also important to consider the additional demands that playing school sports and physical education programs places on players.

There should be as little interference from other school sports as possible, and coaches should communicate with one another to deliver Programs for competition and training are crucial. The coach and the parents should work together to strike a healthy balance between all the variables.

Socio-Cultural

Sport has important sociocultural components that require careful planning to manage. Participating in sports will help people internalize general societal ideals and standards through socialization. As an athlete moves through the LTCD stages, this happens. Positive socialization should cause the player's viewpoints to expand, including a greater understanding and respect for national and racial variety. Learning more about the competition site's history, geography, architecture, food, literature, music, and visual arts can be incorporated into the travel schedule recovery. Sport can provide much more than a journey from the hotel to the playing field with careful annual planning.

Sport subculture must be addressed in sport socialization as well. Group dynamics that foster an abusive or bullying culture must be discouraged by coaches and parents. At every stage of LTCD, ethics instruction should be incorporated into training and competition schedules.

In conclusion, sociocultural activities should not be seen as a bad diversion or as getting in the way of practice and competitiveness. It plays a significant role in the athlete's personal growth.

After the windows of maximum trainability for speed, skill, and suppleness have passed, children frequently decide to participate in sports. Consequently, these kids rely on educational institutions, leisure initiatives, and other athletic associations to Give prompt instruction in these areas. According to LTCD, sports should establish connections with these groups in order to encourage and facilitate suitable training. If athletes completely miss the windows of optimal trainability stated above, the creation of customized programs to remedy any short comings Is recommended.

BUILDING A PATHWAY: THE SEVEN STAGES OF CANADIAN CRICKET LTAD

As previously stated, the LTCD stages are predicated on the idea that sports can be categorized as either early or late specialization sports. Seven phases of athlete growth are distinguished by the Canadian Sport for Life, Long-term Athlete growth:

Stage One: Active Start
Stage Two: Fundamental
Stage Three: Learn to Train
Stage Four: Train to Train
Stage Five: Train to Compete
Stage Six: Train to Win
Stage Seven: Active for Life

Stage One: Active Start
Ages: 0 to Six years

Teaching children basic movement skills and connecting them to play is the aim of the Active Start stage. Young children naturally engage in physical activity, which should include enjoyable play.

Other than supporting groups that encourage physical exercise and physical literacy, cricket has no direct function during the Active Start period.

Stage Two: Fundementals
Ages: 6-8 for girls, 6-9 for boys

Children are introduced to cricket at school through the Kids Cricket game, the Teach Cricket & What is Cricket teaching resource, Playground Markings, and other grassroots activities during the LTCD entrance level, also known as the Fundamentals stage. Children are exposed to cricket throughout this stage, which lasts from around three to four years of age, and they learn the fundamentals of throwing, hitting, and catching. The opportunity for more focused development will be provided by an accredited local club for those who are identified as having a genetic predisposition to the game or who are eager to play. During this Fundamentals period, enjoyment and involvement will be prioritized. Along with fundamental cricket-specific skills, the objective is to develop vital physical abilities like agility, balance, coordination, and speed (ABCs).The kids will be urged to play as many different sports as they can.

Although evidence clearly indicates that late-maturing children may have a higher chance of eventually reaching elite levels, early-maturing athletes are unquestionably superior athletes during their formative years. Spending more time in the critical early stages that shape future physical literacy is probably going to help them.

Positive attitudes about the activities and the kids themselves must be promoted by coaches.They should provide a nonjudgmental, nonthreatening environment where all types of work are praised equally and there is no overt "school-associated" learning. For the kids to be inspired to enjoy cricket, it is crucial that their first experiences with the game be pleasant. During this stage, the foundational abilities for throwing, catching, bowling, and batting are beginning to take shape.

Batting	Bowling	Fielding	Other	Physical
hitting a variety of balls with different bats to develop hand-eye	bowling to develop a sound bowling action, bowling for accuracy and for distance	catching, stopping and retrieving the ball, throwing	have fun, learn about cricket, safety	agility, balance, coordination

Stage Three: Learn to Train
Ages: 8-11 for girls, 9-12 for boys

The players go into the Learn to Train level as they mature. Children will probably be participating in organized hardball cricket matches by the end of this phase, either through school hardball competitions, clubs, provincial association age group teams, or district competitions. To guarantee that skill competence is increased, coaches should make sure that players strive for a minimum of two practice sessions every game during the season. During this stage, the range of maturation is probably broad. With an emphasis on further developing safe and sound batting, bowling, fielding, and wicket keeping skills, players should focus on building upon the competencies learned during the Fundamentals stage, particularly the development of motor skills and coordination. All programs should be enjoyable and activity-based while players are learning how to improve as athletes.

In order to emphasize the significance of physical development for future cricket success, players are exposed to general physical training and an awareness program.

By assisting in the development of the right values and beliefs, coaches can serve as constructive role models. This involves helping kids develop coping mechanisms for both winning and losing, as well as promoting optimistic attitudes when they encounter difficulties.

The relationship between cricket success and physical conditioning should be positively emphasized by both coaches and players. This stage is likely to shape a child's attitude toward training in the future and teach him or her the value of fitness in reaching high levels of performance on the cricket field along with a healthier lifestyle.

Batting	Bowling	Fielding	Other	Physical
set up (grip, stance, backswing), where to stand, front foot - drive & defense, back foot - drive & defense, pull shot, cut shot, running between the wickets	Basic action(grip, run up delivery, follow through), pace, spin, line & length	catching, high catch, offensive, defensive, long, short, overarm, underarm Wicket Keeping: set up, where to stand, basic glove work	basic rules, nutrition/hydration, rest recovery, sport psychology, etiquette, safety	agility, balance, coordination, flexibility, hand & foot speed

Stage Four: Train to Train
Ages: 11-15girlsand 12- 16 boys

This phase of LTCD is crucial. During this phase, many of the crucial physical characteristics will be produced. The Training to Train phase (see Trainability diagram) contains the sensitive times for training strength, speed, and endurance. During this stage, more cricket-specific skills should be introduced while maintaining the ABCs. "Building the Engine" is the focus of this phase.

During this round, the best players will probably be chosen to play regional and provincial cricket. At the U13 and U15 levels, these athletes will compete against the top players from throughout the nation. They will probably take the crucial initial steps toward playing adult cricket near the end of the phase.

To achieve the ideal balance for optimal performance, it is critical to track the players' levels of competitiveness and participation in other sports. Throughout the season, coaches should strive for a play: practice: rest ratio of at least 1:1:1, with the goal of achieving a 1:2:1 ratio. To keep the system "player-centered," this will require efficient communication between the various interest groups. Practices should not be outnumbered by matches.

It should be kept in mind that the most gifted athletes may only have thirty to forty "important" games to showcase their skills to League and private academy selectors between the ages of twelve and fifteen. While match performances will not be the sole selection criterion, they obviously become more important as players progress through this stage. Making ensuring that the players find the ideal balance between play, practice, and rest is the duty of everyone connected to them. In this manner, the athletes are more likely to play at their best every time.

Cricket is the primary focus during this period, even though players are encouraged to continue participating in other sports for diversity and cross-training (Table Tennis, Tennis & Field Hockey).

In order to identify the onset of PHV and the sensitive times of accelerated adaptation to training, as well as to ensure that training of the Five S's is introduced at the appropriate time, it is crucial to carefully monitor the player's growth during this phase using basic height measurements and visual assessment. At the end of this phase, specialization in a position (wicketkeeping, bowling, or batting) should start.

Batting	Bowling	Fielding	Other	Physical
softhands,shot decision making, proper footwork, making a decision on guard, running between the wicket decisions, rotating the strike, batting tactics, front foot drive variations, back foot drive variations, plus new shots (leg glance, sweep, hook)	grip variations for deferent types of delivery, spin, pace, swing, ball care, bowling tactics, control of line & length	tactics of field placement, field placement for various forms of the game, choice of returning the ball to correct wicket, backing up Wicket Keeping: develop wicket keeping skills	better understanding of the rules for various variations of the game, making nutrition & hydration choices, taking personal responsibility for training, advanced sport psychology, code of conduct, balancing sport & education, specialization in batting, bowling & wicket keeping	endurance, strength, flexibility, speed (whole body)

Stage Five: Trainto Compete
Ages: 15-22+ for girls, 16-23+ for boys

The majority of players will reach the Train to Compete level by the time they are sixteen years old for boys and fifteen for girls. Their cricket talents, including technical and tactical work in competitive settings, will be further developed during this phase. In addition to fostering the ideal atmosphere for technique mastery and the growth and improvement of psychological abilities, coaches should place a heavy emphasis on autonomy and independence. Enhancing performance in the majority of sports requires individualized physical and mental development programs.

During this stage, players will participate in cricket at the school, club, and/or provincial levels. Competition and appropriate play should be prioritized, and practice: rest ratios need to be determined. A provincial and national U17 team must be formed in order to offer sufficient competition at the highest level. More retention of talented athletes at this level will result from this.

Significant turning moments occur during this phase. To guarantee that players have a healthy lifestyle during this crucial period, coaches must take into account suitable training and practice schedules.

Batting	Bowling	Fielding	Other	Physical
advanced shot selection, ability to adjust batting skills to type of game and situation, assessing pitch condition, master batting techniques	having a bowling plan, disguising delivery, use of new ball, bouncers (variations), mastering bowling techniques	throwing accuracy, error reduction, master fielding techniques	international travel, getting over jet lag, dealing with flight delays, alcohol & recreational drug use, adapting to various foods, maintaining fitness on the road, relationship issues, sexual relationships, immunization, further develop technical & tactical work in competitive situations, refine psychological skills, have a balanced lifestyle	maximizing - endurance, strength, flexibility speed (whole body), maintaining fitness in a highly competitive schedule, maintenance of body weight

Stage Six: Train to Win
Ages: 22+ for girls, 23+ for boys

Players should have gained the majority of the skills necessary to compete at a high level by the time they reach the Train to Win stage.Team interactions are now the main focus.At this point, the performer's physical attributes are maintained in accordance with their skill needs, and their match-specific skills are further developed. While the international schedule may lead to numerous periodization for the national team program, the training year for elite provincial players will be split into two periods. While the international schedule will feature the ICC Intercontinental Cup, World Cricket League, ICC World Cup Qualifications, and ICC Americas contests, provincial players will compete in their regional provincial tournaments and the National Cricket League.

Batting	Bowling	Fielding	Other	Physical
performance under pressure, error reduction, match specific skills	performance under pressure, error reduction, match specific skills	performance under pressure, error reduction, match specific skills	moving to full time professional athletes, making cricket high performance the most important feature, managing end of career decisions and opportunities, dealing with long-term international travel and hotel living	maximizing- endurance, strength, flexibility speed (whole body), maintaining fitness in a highly competitive schedule, maintenance of body weight, Injury treatment and recovery

Stage Seven: Active for Life
Ages: 22+ for girls, 23+ for boys

Keep up your physical activity by playing cricket or any other sport. Maintain your involvement in the cricket community in various ways. Players move from playing competitive sports to engaging in physical activity for the rest of their lives during this phase. Any age can be used to enter this stage.

The shift from competitive sport to lifetime physical exercise is characterized by this stage. Participants should be able to transition easily between sports and between different facets of sport thanks to the sport system.

Another way to be active for life is to transition from competitive sports to:

- Recreational pursuits including cycling, swimming, hiking, and running
- Age-group competitions like the Master's Games promote competitive sports for a lifetime.
- Jobs in sports, such media, coaching, officiating, sport administration, or small businesses
- Volunteer jobs as administrators, officials, or coaches

The players for whom training and rehabilitation programs are designed should have their demands met. Programs for masters athletes must consider the effects of aging on strength, flexibility, and endurance.

Retaining athletes after they exit the competitive stream requires a positive sport experience. A philosophical change may occur when one enters this stage.

Batting	Bowling	Fielding	Other	Physical
injury prevention	injury prevention	injury prevention	making people aware of both playing and non-playing opportunities in cricket, suitable recreational competitions	maintaining flexibility, maintain suitable level of fitness

LTCDINITIATIVES
(IMPLEMENTATION PLAN)

Cricket BC is aware that changes in the sport at all levels are necessary for the successful implementation of LTCD. Organizational staffing, the distribution of current resources, competition structures, programming, and coach and official education are just a few of the variables that will be impacted by these changes, which will differ from association to association.

Strong leadership and efficient communication and teaching techniques are necessary for LTCD to be successful. Cricket BC, its provincial members, and national, provincial, and territorial stakeholders must form strong partnerships. Members should be encouraged to cultivate similar relationships with their stakeholders.

Several issues have been noted in the process of creating this model for Canadian cricket, along with the suggested actions needed to resolve them. Below is a list of these:

Communication:

- To make sure that all parties involved comprehend and support LTCD, create and carry out a communication plan.
- Create a successful plan to raise Cricket BC's profile and political clout at the national, provincial, and local levels. Boost the federal, provincial, and local governments' acknowledgement of Cricket BC's role in Canadian sport and health.

Organizations:

- To achieve system alignment, strengthen Cricket BC's role in promoting alliances among cricket leagues and organizations within the community.
- Create best practice models that grassroots development organizations can comprehend.
- Provide provincial and associate members with valuable programs and services.
- Motivate PSOs and Cricket BC to strive for more staff support.
- Form alliances with international and professional teams.
  Establish a paradigm for operations and governance that is sustainable and supports accountability and makes it possible for Cricket BC and its provincial associations to accomplish their strategic goals.
- Boost Cricket BC's reputation, prominence, and profile.
- Raise the marketable properties' associated value for Cricket BC.

Coaching:

- To guarantee that the LTCD values and concepts are ingrained in all coaching development programs, Cricket BC's NCCP should be reviewed and any necessary revisions made.
- Boost the quantity of certified and trained coaches across the board. Create mentorship initiatives.
- Create a National Coaches Association that is sustainable.
- Create a database of Canadian coaches at all levels.

Player Development:

- To deliver "Cricket for Life," create and build the Technical Manual, which includes information for each level of the participant/athlete model.
- Include physical literacy in the right phases of a child's athletic development.
- Examine and apply any necessary changes to the playing rules that are in line with the LTCD Stages of Development.
- Introduce new players of all ages to cricket.
- Create and implement an LTCD to address the unique requirements of women in Canada.
- Provide female athletes at all levels of engagement with equal opportunities for participation and excellence.
- Create and put into place a framework for identifying national athletes.

Leaders:

- Develop and implement a Long Term Officials Development program (LTOD).
- Include officials in the administration of competition.
- Expand the number of officials across all competition levels.
- Create a support group for sport science to promote LTCD aspects and concepts.
- In collaboration with the provincial associations, expand the chances for leadership development.
- Create and administer a cricket program for athletic trainers.
- Motivate "retired" cricket players to stay active in the game by serving as administrators, coaches, officials, and player support personnel.

Competition:

- Align competition structures with Player Development Program.
- Conduct a comprehensive analysis of the sports competition framework that supports the growth of athletes and participants, including age-appropriate rule changes.
- Create and carry out a long-term national championship program that will guarantee a suitable excellence pathway for athletes in development.
- Create a suitable National Team program and organization that will enable the team to compete at the highest level in ICC events.
- Make the best decisions for players so they can compete in provincial, national, and international tournaments and seek the best playing chances for themselves.

Facilities:

- Ensure that facilities are of a caliber that supports appropriate training;
- Increase the number and accessibility of suitable practice and competition facilities.

COMPETITIO GUIDELINES

Providing definitive guidelines on levels of competition for cricket is difficult. The circumstances and situations of each player are unique. It is true, though, that there is an issue with too much competition for the best young athletes. Overplaying will unavoidably increase the risk of injury when paired with inadequate fitness levels, bad footwear, physiological imbalances, and poor technique. Early burnout and withdrawal from the sport may also result from it. This flaw in our system must be fixed if a sports system is to be genuinely "player centered."

Guidelines for proper play, practice, and rest ratios will be included in the Cricket BC future competition review. The rules will help the less skilled players, but they are obviously most important to the best players who are most in demand. Various coaches, parents, players, and others involved in the development of a gifted player must agree, cooperate, and reach a consensus on calendar planning in order to handle this delicate matter. It would seem fitting that the national association should make this decision after consulting with provincial and territorial organizations.

Player skill and ability levels in subsequent years will be impacted by practice and training opportunities being disrupted by an imbalanced competition calendar and play to practice ratio.

THE “WINNING MIND”

(ADOPTED FROM ECB LTAD MODEL)

A study titled "Developing a Winning Mind in Young English Cricketers" was created for the ECB in May 2002 by Dr. Steve Bull, the head of the ECB Science & Medicine Advisory Group and the ECB's consulting sport psychologist Sport England provided funding for the study as a component of the ECB World Class Performance Program.

To research the deciding elements connected with a winning mind in English cricket and consequently provide a framework for understanding how winning mind traits might be nurtured in our young cricketers," was the study's main goal.
One hundred and one present cricket coaches were asked to name the 10 English cricket players they thought were the most mentally tough during the previous 20 years. After interviewing the top 15, the group converted the information gathered into a "conceptual model" to show the results.

The significance placed on creating the best possible environment for players to practice and play during their formative years makes these findings pertinent to coaches and support personnel putting LTAD into practice. The ideal setting will then aid in the development of a player's character, which includes their values and beliefs that serve as the foundation for their actions.

According to the study, some aspects of the surroundings are likely to increase the likelihood of having a "winning mind" attitude.

The attitude factors, contributing environmental factors, and coach implications are related in the following table Providing possibilities for training, which in turn will affect player skill and ability levels in later years.

Attitude Implications	Environment	Coach
“Never say die” mindset	Practical sessions that promote completion of a challenge - fitness tests, overload sessions	Clear and repeated message outlining this attitude during lifestyle, training and match performances.
“Go the extra mile” mindset	Practice sessions or activities where players are required to invest extra time & effort to improve their own skills	Recognition through charts, rewards etc. Encourage players to set their own criteria for measuring this. Use of role models from other sports as well as from cricket - mentoring as to how players can transfer this attitude to their own situations.
“Thrive on competition - with self and others ”mindset	Practical sessions that promote completion of a challenge - fitness tests, overload sessions	Present competition so that players learn to define it as a way of assessing how well they’ve prepared and what has been learnt for next time. Enlist sports psychologist to advise on identity, challenge and support values & perceptions. Help players find the best way of thriving on competition.
“Belief in making the difference” mindset	Practice sessions or activities Where the roles and contributions of players are clearly signaled and encouraged to be understood	Constant communication on a one-to-one and team basis to clarify and reinforce the roles and strengths of individual players. Encourage to be“ informed ” what others do to add to player’s own qualities as opposed to changing self into another’s image.
“Exploit learning opportunities” mindset	Use practical challenges - including guaranteed failure and guaranteed win outcomes to train players tore view performance with a learning brief	Encourage “How would we do better next time or how would were peat?” conversations. Every situation can be learned from - encourage players to identify what they want to learn about themselves, their performance and their sport. Use of effective questioning.
“Willing to take risks” mindset	Use of practical challenges and activities which encourage players to calculate risks and assess course of action	Ensure player is aware of what risk is! What is a risk worth taking & what is reckless!
“Belief in quality preparation” mindset	Set up a quality preparation environment in terms of instilling correct attitudes prior to practice and setting out non-negotiable i.e. encourage buy in from players as to what quality preparation means	Discuss/define club and individual standards. Encourage players to set out own training goals and performance indicators during preparation. Define “preparedness” and what it feels like.
“Determination to make the most of ability ”mindset		Use motivational imagery. “Where does the player want to get to?” - how do you want to be remembered sessions.
“Self-set challenging targets” mindset		Constant coach support allowing time to set goals. Constant feedback and support especially on the process for achieving targets - help players to learn how good they are at this and how to get better at it.

Setting a deadline for when these attitudes should be included in LTCD is not feasible nor wise. Such a strategy has risks because it heavily relies on the developmental phases of each person's psychology. Though the coaches will decide when and to whom the "mental toughness" message is appropriate, the studies can assist us think about what makes a great player. Coaches will gain from knowing the psychological traits that are helpful for effective athletic performance, though, and planning their programs accordingly.

THE ROLE OF CRICKET BC AND OTHER SPORTING BODIES

In its role as National Governing Body for cricket, Cricket BC would take on the implementation of many of the structural and frame work changes required. Nationally decided policies would then be implemented locally and in accordance with local requirements.

The following are some of Cricket BC's specific tasks and responsibilities with reference to LTCD:

• Making certain that all pertinent present and upcoming programs and activities that have an impact on the athlete's development align with the objectives of the cricket Long-Term Athlete Development sports system.

• Any necessary modifications to the current system of teacher training, coaching education, and coach development will be designed and implemented under the direction of the development department and the coaching coordinator.

• Making certain that the new system incorporates and aligns with current volunteer, disability, equality, child welfare, facilities, ethics, and other strategies.

• Ensuring that LTCD concepts are incorporated into the creation of competition rules and guidelines.

• Ensuring that the LTCD sports system is supported by adequate financing levels that are directed towards the critical developmental stages of young athletes at the school, club, district/league, and provincial levels.

- Using the minimal quality standards, the Development Department and High Performance Program will provide efficient criteria for talent identification, detection, identification, selection, and development that may be used by clubs, districts/leagues, provincial associations, national teams, and schools.A system of objective measurement to track attained competencies would be part of this.

- Making certain that any proposed projects and programs from outside organizations and agencies are effectively implemented and aligned with the LTCD sports system.

- Developing and managing a successful monitoring system to assess the LTCD procedure.

- The local implementation of the LTCD sports system would fall under the purview of provincial associations. The following would be among their duties and responsibilities:

- Selecting a designated Performance Officer to collaborate with the Cricket BC Development Manager, who oversees the long-term growth of players aged six to fifteen? The Academy Director, clubs, schools, parents, and the DO & Cricket BC High Performance & Development Departments are just a few of the important people with whom the Performance Officer would communicate, create programs, and establish policies.

- In charge of putting in place a Fundamentals program that is uniform across the country for players aged 6 to 9.
- In charge of implementing a successful district/league and provincial program that adheres to Cricket BC's guidelines for practice, training, and competition levels.
- Accountability for enrolling, organizing, and creating the program for the best athletes whose sport of choice is cricket.

- To guarantee that sufficient funds are allocated within Development Plans to support the growth of athletes between the ages of six and fifteen. It will be clear from the Minimum Quality Standards which areas of development should be given priority.

- To guarantee that there is a strong mechanism in place for identifying fresh talent through primary school visits and that those who are identified are connected to suitable, accredited clubs in the area for targeted, continuing development through club/school groupings.

COACH EDUCATION AND DEVELOPMENT

For a new sports system to be introduced successfully, the coach's position will be crucial. The coach has the power to inspire former students and either foster or impede their potential in the future. When the chance presents itself, LTCD will advance concurrently with modifications to the Coach Education and Development system, and any adjustments to the current system will be implemented over a number of years. Regarding LTCD, the following are the functions and duties of the Cricket BC Development Department and the Coach Education Department:

- To make changes to the current Levels 1-3 and coach and teacher education programs, including teacher training.
- Revise the Coaching Manual for Cricket BC.
- To promote and develop an awareness program for the introduction of LTCD principles.
- To encourage and create a program to raise knowledge of LTCD concepts.
- To create and present the Coach Development Workshop on LTCD, with a focus on teaching the Learning to Train, Train to Train, and Fundamentals stages.
- To track developments, assess achievements, and revisit these on a regular basis.
- To provide current coaches with training on how to implement the LTCD cricket sports system.
- To create and administer additional training and development materials in order to assist the LTCD system.
- To support the LTCD system, a mandatory Movement Skills for Cricket Workshop will be developed in collaboration with the Canada Coaching Association for all pre-Level I coaches.

CLUBSAND CLUB DEVELOPMENT

- Clubs and academies will be crucial to the implementation of any new system. The following roles and responsibilities are suggested:
- Selected clubs or academies that are a part of a nationally recognized organization will serve as the "pilot" for the growth process at first. Together with the Territorial/Provincial Boards, they will be in charge of providing the
- Fundamentals, The ability to train and train to LTCD training phases (ages 6-16). It is anticipated that more clubs and academies would be added to deliver the system as it becomes available.
- Since it is anticipated that the gifted cricket player will play more hours,
- Along with the Territorial/Provincial Boards, it is suggested that clubs and academies pick up some of the "slack" and offer more local venues where athletes can train and practice under the guidance of professionals.
- As part of the program, clubs and academies can look for sponsorship and/or charge fees to hire enough suitably qualified coaches and volunteers to deliver the program in order to obtain benefits, resources, and funds.
- To ensure that the system is delivered effectively by fostering a close working relationship with the local schools and their territorial/provincial board.
- To offer suitable outdoor practice spaces for club growth and, if the chance presents itself, to Territorial/Provincial Board teams as part of a summer practice schedule.

- The Cricket BC Coach Education Department and local Provincial Associations will provide club/academy coaches with access to LTCD training and support programs.
- "Pathway to Success" posters detailing Cricket BC's assistance for the player and their route map from the "Playground to the International Arena" must be displayed by accredited clubs.

LONG-TERM ATHLETE DEVELOPMENT PLAN FOR WOMEN'S CRICKET IN CANADA

The growth of women's cricket in Canada is at a turning point. Although the national team has been playing well, there has not been enough grassroots growth. Because of this, it has been difficult to recruit and retain female athletes. Women's cricket must be sponsored and promoted in a way that attracts new players and gives top female cricket players the opportunity to compete on the international scene in order to expand the sport and keep our national team moving forward.

Objectives of the Long Term Cricket Development Plan

- To enhance the organization and support of women's cricket by encouraging cooperation between local clubs, players, and Cricket BC, among other cricket organizations at all levels.
- Objective to guarantee the National Team's continued competitiveness and World Cup qualification in 2013.
- To establish a leadership program aimed at identifying and preparing the players, coaches, administrators, officials, and leaders of today and tomorrow who will advance women's cricket in Canada.

Current Status of Women's Cricket in Canada

• The estimated number of women who play cricket in Canada is quite small, at about 140. Fewer opportunity

For Canadian women to participate in organized cricket. Women's poor engagement in cricket is a result of a number of factors, including a lack of knowledge about the chances that are currently available and the relative "newness" of the national team's top program.

• Victoria, Edmonton, Calgary, and Toronto currently have the only structured cricket programs for women. Women are not able to participate in club or provincial contests with or against other women.

• Both traditional and non-traditional cricketing cultures do a very poor job of promoting cricket in general and women's cricket in particular.

• No feeder system is in place to take young girls from school or youth groups and give them the right guidance and support.

• At the top level, the National Team must continue to win in global competition despite having limited resources and limited access to high

• Techniques for performance training. Given the current training infrastructure, Canadian players may soon be unable to keep up and compete at an elite level due to the growing international competition in the Americas.

• There are numerous challenges in attracting and keeping players with the ability to compete at an international level due to Canada's poor training facilities and the lack of possibilities for women to play cricket.

Requirements for the Future Success of Women's Cricket in Canada

- Assign adequate financial and personnel resources to national women's cricket support. The National Team's accomplishments can be used to increase Canadian interest in women's cricket.
- Appoint a female athlete to the Cricket BC board in order to
- Encourage prompt and open contact between officials and cricket players. Expand Victoria's and Toronto's current women's cricket programs. Make use of the knowledge in these effective women's programs to assist
- Create initiatives in cities and provinces without formal women's programs at the moment.

• Assign adequate financial and personnel resources to national women's cricket support. The National Team's accomplishments can be used to increase Canadian interest in women's cricket.

• A women's athlete representative should be appointed to the Cricket BC board to facilitate prompt and open communication between administrators and players. Expand Victoria's and Toronto's current women's cricket programs. Make use of the knowledge in these effective women's programs to assist Create initiatives in cities and provinces without formal women's programs at the moment.

• Make sure that Cricket BC's website continues to improve. the promotion of women's cricket in Canada by providing images, details on how novices and seasoned players can get involved, and information about the opportunities available to them.

SUMMARY

A important sport in the world, cricket has the potential to make Canada a strong contender on the global stage. It must overcome a number of current issues and make certain adjustments to broaden its base of participation, encourage the discovery of talent, and put in place a strategy that leads to alignment and integration of the sport system in order to attain this position.

This change is made possible by the Long Term Cricket Development Model, which also gives Cricket BC a way to accomplish its objectives. In addition to increasing cricket's awareness and involvement in Canada, the application of this approach will be crucial in enabling Canadian cricket to realize its full potential on the global scene. To address the flaws in the current athlete preparation system, LTCD offers a comprehensive framework and a rational participant developing pathway. More precisely, the LTCD model calls for a paradigm change in Canadian cricket;

- Is a philosophy and a tool for change in the delivery system for Cricket?
- Identifies shortcomings in the Cricket BC delivery system and provides guide lines for problem solving.
- Provides sport system alignment and integration between physical education, school sports, sport and recreational physical activities, and high performance sport.
- Is participant- centered from a child's first involvement in sport and physical activity to the transition to lifelong physical activity or other sport related activities.
- Provides a frame work for reviewing Current practices, developing new initiatives, and standardizing programs.
- Establishes a clear development pathway from playground to podium and on to being active for life.
- Provides guidelines for planning for optimal performance for all stages of participant development.
- Provides key partners with a coordinated structure and plan for change.
- Identifies and engages key stakeholders in delivering change.

Developing Physical Literacy is one of the corners tones of the LTCD Model. This involves understanding key concepts that influence training as players move from childhood to maturity and the interplay between physical, cognitive and emotional development. All stakeholders should have a good grasp of physical literacy and be familiar with:

- The five stages of training.
- Markers for developmental age (onset of PHV, sensitive periods) , identification of these ,and the implications for training.
- The ten's periodization, and the alignment of the competitive calendar with athletic development. Recognition for the dynamic nature of the LTCD model is also important. This requires ongoing monitoring and adjustment of training at all levels in response to new knowledge, research, and sport-specific developments.

The establishment of effective communication channels between stakeholders (participant, instructors, coaches, educators, administrators, sponsors, spectators, officials and national/ multinational organizations) is essential. This communication must be based on a set of principles consistent with the LTCD model.

The aforementioned suggestions will help women's cricket in Canada, but more work needs to be done to raise the sport's profile, performance, and participation rates nationwide.

Among them are initiatives to promote women's cricket across Canada by:

- expanding the range and quantity of cricket-playing possibilities available to women in Canada.
- offering female cricket players of all ages and skill levels a friendly and demanding atmosphere.
- integrating coordinators and coaches at all levels to raise awareness of women's cricket.
- expanding the number and caliber of female cricket administrators, officials, and coaches.
- Using coaching methods that target training elements unique to women.
- Boost human and financial resources to help women's cricket at the national level.

In addition to encouraging more Canadians to play cricket, LTCD will give them the tools and chances they need to reach their full competitive potential or just stay active throughout their lives.

The LCAD model's implementation necessitates a paradigm shift for all parties involved as well as efficient collaboration and communication. However, cricket will be able to thrive in Canada thanks to the LTCD model. Cricket BC's embrace of this approach offers Canadian cricket a fantastic chance to realize its potential for higher participation and top-tier performance on a national and worldwide scale.

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APPENDIXONE

PHYSICAL, MENTAL / COGNITIVE AND EMOTIONAL DEVELOPMENT

(ADAPTED FROM CANADIAN SPORT FOR LIFE RESOURCE PAPER)

Fundamental Stage: Physical development Characteristics and implications

Basic characteristics

- Compared to smaller muscle groups, larger muscular groups are more developed.
- Compared to the rest of the body, the heart is getting bigger. Cardiovascular development is ongoing.
- The ends of the bones are still cartilaginous and continue to ossify, but the ligaments are getting stronger.
- As this phase comes to a finish, basic motor patterns becoming more complex, and the inner ear's balancing system gradually develops.
- Although girls develop coordination abilities more quickly than boys at this phase, there are very few developmental differences between the sexes.

Performance capabilities &limitations

- Compared to carefully coordinated motions involving the interaction of numerous smaller muscles, children are more adept at coarse movements involving large muscle groups.
- The young players' endurance capacity is more than sufficient for the majority of activities.
- The young person's body is particularly vulnerable to harm from high levels of stress or strain.
- By the end of this phase, there is a noticeable improvement in the ABCs of agility, balance, coordination, and speed.
- At this developmental stage, sex differences do not have a significant impact.

Implications for the cricket coach

- During this stage, fundamental abilities should be established.
- It is best to schedule brief anaerobic alactic exercises (short, sharp sprints lasting 4-6 seconds, interspersed with 2-minute rest periods).
- When jumping and bounding, use gradual movements. Only body weight or a suitable medicine ball can be used for strength training (neural recruitment, or nervous system adaptation).
- Activities and games tailored to cricket should prioritize coordination and kinesthetic awareness. The most suitable activities are those that involve gymnastic or athletic motions.
- At these ages and at this time, it is important to stress both training and playing together.

Mental/cognitive development Characteristics and implications

Basic characteristics

• Children are action-oriented and have a short attention span. Memory is gradually improving.
• Children in this stage are not very good at reasoning. The ability to think more abstractly increases later in the phase.
• People really enjoy doing the same things over and over. Young players gain experience, which helps them get better.
• Creativity is thriving.

Performance capabilities &limitations

• Children are typically leader-oriented; they enjoy being led! • Young players are unable to sit and listen for extended periods of time.
• Young athletes do not acquire the skills properly. by trial and error.
• It is important to promote creativity and experimentation.

Implications for the cricket coach

- Makes use of brief, uncomplicated instructions. Youngsters want to participate and move. This level of work requires coaches with outstanding communication skills.
- Coaches should take a "follow me" or "follow your leader" stance and make sure that every activity is enjoyable and thoughtfully organized. During a warm-up, for instance, urge kids to follow you while you tumble, forward roll, contact the floor or walls, etc.
- At this level, coaches must be able to correctly demonstrate fundamental cricket abilities. Coaches that possess exceptional technical modeling skills ought to operate at this level.
- Encourage the kids to share their thoughts and opinions while they are playing and practicing. They will enjoy trying new things! Establish a judgment-free atmosphere.

Emotional development Characteristics and implications

Basic characteristics

- The kids' perception of themselves is growing as a result of their experiences and other people's feedback.
- Kids enjoy being the center of attention and concentration.
- Peer pressure turns into a powerful motivator for all activities.
- The youngster starts to comprehend the importance of structure and rules.

Performance capabilities &limitations

- Kids use these experiences as a way to assess themselves: "If I perform well, I am a good person; if I do poorly, I am a nasty person."
- They rapidly lose confidence when things start to seem dangerous.
- One's ability to participate in physical activities and talents is frequently a determining factor in peer group acceptance.
- Youngsters can comprehend and participate in simple games with straightforward rules. They also have a tendency to challenge regulations and demand careful responses.

Implications for the cricket coach

- Children require frequent positive reinforcement and a positive self-perception. This will give you the drive to carry on with the exercise.
- Arrange technical and tactical tasks in a way that nearly ensures success. This entails moving from easy to more difficult tasks.
- In addition to offering a diverse program of real-world opportunities for technical and tactical development and improvement, coaches must be able to evaluate fundamental skills.
- Children should receive equal recognition for all of their hard work. Winning should not take precedence over participation and enjoyment. The process, not the result, is the main focus!

Learning to Train/Training to Train: Physical development Characteristics and implications

Basic characteristics

- Notable proportional alterations in muscle, fat, and bone tissue Boys start their growth spurt between the ages of 12.5 and 15 and girls between the ages of 12.5 and 14. The average age at which girls reach their maximal growth rate is 11, whereas the average age for boys is 14.
- More development is occurring in smaller muscle groups.
- The body's various sections do not grow at the same rate throughout this phase. The arms' and legs' growth rates will both peak before the trunks.
- The male hormone testosterone causes a considerable rise in red blood cells, particularly in boys.
- The development of the central nervous system is about complete.

Performance capabilities &limitations

- Girls are faster and stronger than boys in the early stages of growth spurt adaptation, which is influenced by abrupt changes in body proportions. Later in the phase, the situation is reversed.
- During this stage, coordination, speed, and agility continue to improve quickly.
- Training content will be determined by changes in core strength, limb length, and center of gravity.
- Aerobic endurance is still growing, and the oxygen delivery system is continually evolving.
- It is completely possible to train coordination, balance, and agility.

Implications for the cricket coach

• To guarantee adaption, closely monitor training and personalize the curriculum.
• Grouping players based on chronological age may not be the best approach.
• Situations where sexual development causes fear, guilt, or anxiety should be avoided.

• All fundamental technical skills can be mastered with the development of fine motor skills. Physical, technical, tactical, and ancillary skills (e.g., warm-up, cool-down, diet, nutrition, hydration, etc.) should all be taught to players during their training.

• Because limb growth may impact technique, some previously learned abilities may need to be relearned. Because of the increase in body bulk, more organized aerobic training. Anaerobic activities should only be done for brief periods of time.

Mental/cognitive development Characteristics and implications

Basic characteristics

- The foundation of abstract thinking is strengthened.
- Young athletes start to think egocentrically in a new way. Self-identity is given a lot of attention.
- Young athletes are keen to hone their abilities.

Performance capabilities &limitations

- It is necessary to implement decision-making through increasingly intricate technical instruction and practice.
- This could lead to a severe fear of failing.
- The learning process needs individualized, targeted guidance and organization. To stay motivated, it is critical to use a range of success measurement techniques.

Implications for the cricket coach

- The player's skill level should be taken into consideration when choosing tactical solutions.
- Assign skill and drill levels and establish the best possible learning environment. Focus on mastery.
- Provide basic coping mechanisms for both winning and losing, as well as constructive responses to obstacles.
- Set a good example by exhibiting "winning mentality" principles and beliefs.
- It is essential to provide positive reinforcement. Physical and mental growth might differ significantly, thus it is important to avoid choosing the early developers and ignoring or rejecting the late ones. The coach's capacity to exhibit particular abilities is crucial.

Emotional development Characteristics and implications

Basic characteristics

- Peer groups have a significant impact on behavior, and players are able to cooperate and take on some responsibility during this stage.
- In general, there is tension between teenagers and adults.
- It is critical that young players be able to express affection, respect, and gratitude at this developmental stage.
- The rate at which mental, emotional, and physical maturity develops varies.
- Having pals of the other sex is desired.

Performance capabilities &limitations

- Some participants may be less accountable mostly because they are afraid of failing; the group is establishing and reinforcing values and attitudes.
- Adults should maintain open lines of communication since all teenagers require assistance, even if they are not aware of their need or appear appreciative of it.
- Lack of these attributes frequently results in exaggerated and/or inappropriate behavior.
- As a result, one may experience feelings of uncertainty or anxiety.
- For this age group, social activities are significant occasions.

Implications for the cricket coach

- The coach should have strong supervision and guidance skills. At this stage, setting an example for young athletes is crucial.
- The coach and players need to communicate openly.
- A coach should constantly try to encourage two-way communication because they are typically more accepted than other adults. Coaches should foster an environment where people can make decisions, choose approaches, form opinions, and make mistakes.
- Early matures become into leaders and perform exceptionally well. Coaches should refrain from forming "in and out" groups because this may hinder the growth of other players.

Training to Compete:
Physical development
Characteristics and implications

Basic characteristics

- The respiratory and circulatory systems mature.
- Weight and height gains eventually slow down, and the muscular system stabilizes.
- Both males and females continue to undergo skeletal maturation.
- While boys typically do not reach adult proportions until several years later, girls typically do so by the age of 17.

Performance capabilities &limitations

- These systems can typically provide the highest possible output.
- Although muscles have reached their mature size, physical strength is still increasing and peaks in the late twenties.
- The strengthening of connective tissues continues.
- During this stage, girls gain weight more than boys proportionately.

Implications for the cricket coach

- It is possible to train both anaerobic and aerobic systems to produce maximum output. Complete energy system training tailored to cricket should be put into place.
- To enhance general strength development, strength training can be optimized. During this time, neuromuscular training should be optimized.
- Training should continue to use progressive overloading.
- To maximize aerobic training for girls. Coaches need to understand how to handle weight gain and its impact on a person's figure.
- All technical, tactical, and ancillary aspects of competition should be taught to players.

Mental/cognitive development
Characteristics and implications

Basic characteristics

- The brain typically reaches adult size by the age of 16, but it continues to undergo neurological development for a number of more years.
- During this stage, critical thinking skills are well developed.

Performance capabilities &limitations

- Players can cope with multiple strategies and tactics, particularly near the end of the phase.
- The capacity of self-analysis and correction is developing.

Implications for the cricket coach

• Coaches should make sure that all technical and tactical skills are improved.
• Technical and tactical development should be used to advance decision-making.
• Coaches to encourage independence and self-reliance.
• Coaches should establish an atmosphere that encourages players to make choices, choose strategies, and form opinions.
• A disciplined setting to preserve a solid foundation of competitive mastery values.

Emotional development
Characteristics and implications

Basic characteristics

- Peer group influence is still a powerful force.
- Players are searching for a stable, balanced self-image.
- Activities and interaction with the opposite sex are important during this phase.

Performance capabilities &limitations

- There is an increase in the development of autonomous decision-making and leadership abilities.
- Success and failure continue to have a significant impact on one's self-concept. Coping mechanisms are helpful.

Implications for the cricket coach

- While firm direction and discipline must be upheld, players should be given the chance to grow by taking part in suitable leadership or responsible roles (such as captaincy).
- It is essential to evaluate performances favorably and provide positive reinforcement.

Training to Win
Physical development
Characteristics and implications

Basic characteristics

- During this stage, the body physiologically matures.
- Females reach their final skeletal maturation between the ages of 19 and 20, while males do so about three years later.
- Performance limits and capabilities.

- It is possible to train every physiological system.

Implications for the cricket coach

- The best physical training methods and regimens should be employed by coaches in order to maximize adaptation and reduce injuries.
- Coaches should make sure that all body alignments and muscle groups are properly balanced and complemented by the best possible ranges of flexibility.
- Cutting-edge monitoring and testing tools will be employed.

- Overstress and overtraining need to be closely watched.

- To prevent iron deficiency, female athletes should undergo additional blood tests in addition to routine, appropriate medical monitoring.

Mental/cognitive development Characteristics and implications

Basic characteristics

• The brain matures neurologically between the ages of 19 and 20.

• The necessity of rules, laws, and structure is fully understood and accepted.

Performance capabilities &limitations

- Players are able to evaluate themselves, make necessary corrections, and hone their talents. All aspects of cricket can be conceptualized and analyzed by players.
- The player's capacity to visualize spoken instructions is enhanced by well-developed information processing abilities.
- The young player needs to believe that the framework and regulations are fair and well-defined.

Implications for the cricket coach

- The best physical training methods and regimens should be employed by coaches in order to maximize adaptation and reduce injuries.
- Coaches should make sure that all body alignments and muscle groups are properly balanced and complemented by the best possible ranges of flexibility.
- Cutting-edge monitoring and testing tools will be employed.
- Overstress and overtraining need to be closely watched.
- To prevent iron deficiency, female athletes should undergo additional blood tests in addition to routine, appropriate medical monitoring.

Emotional development Characteristics and implications

Basic characteristics

- Self-actualization and self-expression are crucial; self-direction and independence are required.
- At some point during this stage, important decisions regarding education, lifestyle, and career are made.
- Developing long-lasting relationships with people of the other sex is a top priority.

Performance capabilities &limitations

- The participants are prepared to take ownership of their acts and accept the consequences.
- During this phase, there are significant changes in hobbies, interests, and physical activity.

Implications for the cricket coach

- Setting goals should be a top priority in order to provide the player's entire program with clear direction and purpose.
- The coach's guidance and organization are still crucial, but the players must be treated with the respect of adults.
- Expert advice ought to be given
- Accessible in light of academic endeavors and the off-season.
- There must be lots of chances for players to engage in autonomous social interaction.

APPENDIX TWO

SKILL MATRIX

FUNdamentals 6-8 Girls 6-9 Boys	Learn to Train 8-11 Girls 9-12 Boys	Train to Train 11-15 Girls 12-16 Boys
BATTING: hitting a variety of balls with different bats to develop hand-eye coordination BOWLING: bowling to develop a sound bowling action, bowling for accuracy and for distance FIELDING: catching, stopping and retrieving the ball, throwing OTHER: have fun, learn about cricket, safety PHYSICAL: agility, balance, coordination IMPLEMENTERS: Cricket BC Kids Program, elementary schools, community groups	BATTING: set up (grip, stance, backswing), where to stand, front foot - drive & defense, back foot - drive & defense, pull shot, cut shot, running between the wickets BOWLING: basic action (grip, run up delivery, follow through), pace, spin, line & length FIELDING: catching, high catch, offensive, defensive, long, short, overarm, underarm Wicket Keeping: set up , where to stand, basic glove work OTHER: basic rules, nutrition/ hydration, rest recovery, sport psychology, etiquette, safety PHYSICAL: agility, balance, coordination, flexibility, hand & foot speed IMPLEMENTERS: middle schools, clubs, academies, leagues	BATTING: soft hands, shot decision making, proper footwork, making a decision on guard, running between the wicket decisions, rotating the strike, batting tactics, front foot drive variations, back foot drive variations, plus new shots BOWLING: grip variations for deferent types of delivery, spin, pace, swing, ball care, bowling tactics, control of line & length FIELDING: tactics of field placement, field placement for various forms of the game, choice of returning the ball to correct wicket, backing up Wicket Keeping : develop wicket keeping skills OTHER: better understanding of the rules for various variations of the game, making nutrition & hydration choices, taking personal responsibility for training, Advanced sports cytology ,code of conduct, balancing sport & education, specialization in batting, bowling & wicket keeping PHYSICAL: endurance, strength, flexibility, speed(whole body) IMPLEMENTERS: middle schools, clubs, academies, leagues

Train to Compete 15-22+ Females 16-23+ Males	Train to Win 22+ Females 23+ Males	Active for Life Any Age
BATTING: advanced shot selection, ability to adjust batting skills to type of game and situation, assessing pitch condition, master batting techniques BOWLING: having a bowling plan, disguising delivery, use of new ball, bouncers (variations), mastering bowling techniques FIELDING: throwing accuracy, error reduction, master fielding techniques OTHER: international travel, getting over jet lag, dealing with flight delays, alcohol & recreational drug use, adapting to various foods, maintaining fitness on the road, relationship issues, sexual relationships, immunization, further develop technical& tactical work in competitive situations, refine psychological skills, have a balanced lifestyle PHYSICAL: maximizing - endurance, strength, flexibility speed (whole body), maintaining fitness in a highly competitive schedule, maintenance of body weight IMPLEMENTERS: high schools, clubs, academies, leagues, National Cricket League, National team	BATTING: performance under pressure, error reduction, match specific skills BOWLING: performance under pressure, error reduction, match specific skills FIELDING: performance under pressure, error reduction, match specific skills OTHER: moving to full time professional athletes, making cricket high performance the most important feature, managing end of career decisions and opportunities, dealing with long-term international travel and hotel living PHYSICAL: maximizing - endurance, strength, flexibility speed (whole body), maintaining fitness in a highly competitive schedule, maintenance of body weight, Injury treatment and recovery IMPLEMENTERS: National Cricket League, National team	BATTING: injury prevention BOWLING: injury prevention FIELDING: injury prevention OTHER: making people aware of both playing and non-playing opportunities in cricket, suitable recreational competitions PHYSICAL: maintaining flexibility, maintain suitable level of fitness IMPLEMENTERS: clubs

CANADIAN MEN'S NATIONAL TEAM

CRICKET BC

LONG-TERM ATHLETE DEVELOPMENT