



Long Term Player Development



A player development programme of the South African Table Tennis Board



sport & recreation
Department:
Sport and Recreation South Africa
REPUBLIC OF SOUTH AFRICA



Contents

FOREWORD	4
GANIEF FATAAR	4
ACKNOWLEDGEMENTS.....	5
INTRODUCTION.....	6
A HISTORY OF THE SATTB.....	6
PARTICIPATION IN INTERNATIONAL COMPETITIONS.....	7
TABLE TENNIS IN SOUTH AFRICA	7
BACKGROUND TO LONG TERM ATHLETE / PLAYER DEVELOPMENT	8
SEVEN STAGES OF LTPD.....	8
THE 10 KEY FACTORS OF LTPD.....	10
Sensitive Periods for Trainability (Balyi and Way, 2005).....	11
TRAINABILITY AND THE 10 S's.....	13
RATIONALE	16
GUIDING PRINCIPLES.....	16
STAGE DESCRIPTIONS.....	17
ACTIVE START.....	18
FUNDAMENTALS	20
LEARNING TO TRAIN	22
TRAINING TO TRAIN.....	25
TRAINING TO COMPETE.....	27
TRAINING TO WIN	29
ACTIVE FOR LIFE.....	31
LTPD SUPPORT PROGRAMMES	32
LONG-TERM DEVELOPMENT OF COACHES	32
LONG-TERM DEVELOPMENT FOR TECHNICAL OFFICIALS.....	33
LEADERSHIP AND SUCCESSION.....	34
LTPD RESOURCES FOR PROVINCIAL AFFILIATES, SCHOOLS AND CLUBS.....	34
COMPETITION	35
A) FACTORS IN COMPETITION PLANNING.....	35
B) COMPETITION REVIEW.....	35
Competition at the Active for Life Stage.....	37
D) PLAYER MONITORING.....	37
IMPLEMENTING LTPD IN SOUTH AFRICA.....	39
ROLES, RESPONSIBILITIES AND ACTION PLANS	39
REFERENCES.....	40
APPENDIX A.....	41
GLOSSARY OF TERMS.....	41
APPENDIX B.....	43
TRAINING MATRIX: SKILLS.....	43
TRAINING MATRIX: PHYSICAL CAPACITIES 1	44
TRAINING MATRIX: PHYSICAL CAPACITIES 2	44
TRAINING MATRIX: PHYSICAL CAPACITIES 3	45
TRAINING MATRIX: PREPARATION AND RECOVERY	46
TRAINING MATRIX: PSYCHOLOGICAL SKILLS	48
APPENDIX C.....	49
PLAYER DEVELOPMENT MODEL.....	49
APPENDIX D.....	50
PLAYER EVALUATION FORM.....	50
APPENDIX E	51
THE INCLUSIVITY PROGRAMME	51

Foreword

President SATTB

This document and the philosophy of a player centred development approach that it promotes, is a milestone for South African table tennis.

It provides a frame work for the development of the player from an early age to the provision of the game to our seniors and masters.

The South African Table Tennis Board (SATTB) is looking to provide our players with the necessary skills to reach their maximum potential in the game and to support healthy physical activity throughout their lifetimes.

With our LTAD guidelines, we are looking further into the future than simply teaching skills to win games or tournaments today or tomorrow; we are promoting a lifelong love of the sport and building the skills and capacities that will serve our players whether they pursue medals in high performance or simply choose table tennis for recreation as part of an active lifestyle.

This document should inspire all those involved in South African table Tennis to question and challenge conventional thought in all areas from technical execution to facility design, from equipment selection to competition structure, and from coaching education to rules and etiquette. I invite you to read the information presented in this document and reflect on the importance of your role in helping to make LTPD the guideline for table tennis development.

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Introduction

The history of the SATTB

The unity was between the then South African Table Tennis Union (SATTU) that was formed in 1939 and the South African Table Tennis Board (SATTB) that was formed in 1948. The two organisations SATTU and SATTB signed a declaration of intent on 21 July 1991 to unite the SATTB and SATTU into one controlling body for Table Tennis in South Africa.

SATTU was affiliated to South African National Olympic Committee (SANOC) and the Confederation of South African Sports (COSAS).

The SATTB was affiliated to the African Table Tennis Federation (ATTF), International Table Tennis Federation (ITTF) and National Olympic Sports Congress (NOSC).

The SATTB enjoyed the membership of both the ATTF and ITTF during the isolation years.

The unification process was facilitated by Mr Hans Gisecke, Vice-President Finance (ITTF), Mr George Segun President of the ATTF and Mr Fikrou Kidane Special Advisor to the IOC on African Affairs.

The Declaration of Intent outlined the mandate of the unified interim structure for the next two years, which commenced on 21 July 1991 – December 1993, after which democratic elections would be held to elect the Executive Body.

In February 1992 an Inauguration Championships was held in Johannesburg and once again we were honoured by the presence of Mr Ichiro Ogimura President of the ITTF, Mr George Segun President of the ATTF. Mr Ichiro Ogimura mentioned at this event that he would be discussing the possibility of awarding two wild cards to South Africa to participate in the 1992 Barcelona Olympic Games with his executive, which had the support of the ATTF and NOSC. South Africa was awarded two wild cards and the two athletes that represented South Africa was Mr Louis Botha (SATTU) and Miss Cheryl Roberts (SATTB) the decision to send these two athletes was met with some resistance, the National Interim Body was determined that it would be a team of National Unity.

In 1993 South Africa's participation in the World Championships, raised the issue of merit selection versus a team of national unity. The SATTB then sought the advice and assistance of Dr Sam Ramsamy President of the newly formed NOCSA. The interim executive agreed that a team of National Unity would represent South Africa in Gothenburg, Sweden. This decision was made to further consolidate the transformation process.

On the 24 July 1993 the secretariat circulated a preliminary agenda notice for the Biennial General Meeting and calling for elections for the executive board. During this phase the national executive realised that unification within certain affiliates was not being achieved and this was evident when the nominations was received from the affiliates for the National Executive Board.

At the Biennial General Meeting held on 26 September 1993, Mr Ichiro Ogimura, Mr George Segun and Mr Bas van Brejen ITTF Media Chairperson was present, This was the turning point for the unification process within the SATTB.

After much deliberation the delegates agreed that the unity process be extended for another year.

During the period 1993-1994 the executive agreed that South Africa would not be participating in World events except in Zonal and Continental competitions. The rationale was to consolidate the efforts of the development programmes and to ensure that unity is achieved by all the affiliates of the SA Table Tennis Board.

It was also realised that the existing structure of the national executive was too cumbersome and a more lean and effective structure had to be implemented, which in effect meant a National executive of six persons with sub-committees. This proposed amendment was to be tabled at the AGM that was held in 1994 in Cape Town.

The Annual General Meeting was held on 25 September 1994 in Cape Town and was adjourned. The continuation of the AGM was re-convened on 22 April 1995 in Johannesburg and a New Executive Committee was elected.

By this time The SATTB was confident that team selection would be on merit as the development programmes was starting to produce the desired results, and this was evident when we participated in the 6th All Africa Games in Harare 1995.

International Participation

Notable achievements since 1995 was the SATTB's participation at World level:

Commonwealth Championships Glasgow (1997)
World Championships Manchester (1997)
Commonwealth Championships (1999)
World Team Championships Malaysia (1999)
World's Individual Championships Holland (1999)
Combined Championships in Japan (2001)

The current World Team Ranking for South Africa is 71 for Men and 68 for Women.

The highest-ranking position of our current players is S. Overmeyer at

Continental Participation

Since unification the SATTB participated in Continental Championships and have made remarkable progress.

Participation in international Competitions

Table Tennis is played in three in the World major events:

- Olympic Games
- Commonwealth Games
- All Africa Games
- Inter-country tests

Table tennis in South Africa

(A brief SWOT Analysis)

Background to Long Term Player Development Programme

Long Term Athlete Development is an athlete centred model of an integrated sports system where the requirements of the player, dependent on their biological age are met by providing the right coaching at the right time.

An approach that outlines the appropriate training, competition and recovery programme at each stage. It is also an approach that focuses on maximising player development.

Evidence shows that in most cases players do not excel at adult level due to a distinct lack of physical and technical excellence caused by developmental neglect in the early years. The use of a Long Term Athlete Development method advocates a much longer and more systematic approach.

Seven Stages of LTPD

LTPD identifies seven basic stages in the optimal development of a player essentially from childhood to adulthood based on the physical, mental, emotional and social maturation of the individual.

Training and competition guidelines for each stage stipulate appropriate formats for game play, preferred training methods, optimal ratios of training to competition hours, and targets for development of technical, tactical, physical, psychological and ancillary capacities in the player. Through a thoughtful and systematic approach, LTPD optimizes player development at each stage of maturation and avoids the hazards associated with arbitrarily imposing adult training regimens and competition formats on children.

Active Start (0-6 years)

Children are introduced to basic physical movement and activity in play settings. The emphasis is on fun and engagement in daily physical activity, not competition. Healthy activity and play stimulate development of their physical coordination and gross motor skills along with brain function, social skills, emotions, imagination, confidence and positive self-esteem.

FUNDamentals (6-9 males, 6-8 females)

Through a variety of physical activities, children are introduced to fundamental movement skills such as running, jumping, throwing, hitting and kicking – activities that will later form the basis for most sports skills. Like the Active Start stage, the emphasis is on FUN.

Learning to Train (9-12 males, 9-11 females)

Children transform their FUNDamental skills into sport-specific skills within structured training settings, though the emphasis is on learning a variety of sports and avoiding early specialization.

Training to Train (12-1 males, 11-15 females)

Pre-adolescents and adolescents consolidate their basic sport-specific skills and may begin moving towards specialization in one sport, especially if they are identified as possessing special talent and choose to pursue high performance in their sport. However, they are still encouraged to participate in at least one other sport or activity.

Training to Compete (16-23 +/- males, 16-21 +/- females)

Athletes have specialized in their sport and now work to optimize all of their athletic capacities – technical, tactical, physical, mental, emotional, and more. Training regimens are intense, and the aim is to prepare the athlete for elite competition and podium performances.

Training to Win (19 +/- males, 18+/- females)

The athlete's physical, technical, tactical, mental, and lifestyle capacities are fully established. The focus of training shifts to the maximization of performance in order to win national and international competitions.

Active for Life (any stage males and females)

Athletes transition from a competitive focus to lifelong participation in recreational sport and/or physical activity. This transition may occur at any time during the previous stages, though ideally no earlier than the Learning to Train stage, when the athlete has mastered basic 'physical literacy' (see 'FUNDamentals' on page 14).

Table Tennis Stages

Table Tennis is regarded in athlete development terms as an “early specialisation sport”. Based on principles regarding the growth and development of children and young adults, and taking into consideration that table tennis is regarded as an ‘early specialisation sport’ the LTAD programme for Table Tennis appears to be the stage model, as below.

Stage	Age
Active Start	0-6 years
FUNdamentals	
Learning to Train	Early Phase 6-9, 9-12
Training to Train	12 – 15
Training to Compete	15 – 18
Training to Win	19 +/-
Active for Life	Any age

The 10 Key Factors of LTPD

The 7 stages of LTPD have been defined according to 10 broad key factors that athlete scientists have identified for successful athlete and player development. The 10 key factors relate to processes of human maturation and how these processes interact with training, competition and recovery program design through an athlete's lifetime.

These key factors have been gleaned from the most current global research in athlete science, together with observed best practices in training, competition and sports system management around the world.

1. The 10-Year Rule

Research suggests that it takes at least 10 years and 10,000 hours of training for talented athletes to reach top performance levels. This translates to slightly more than three hours of daily training and competition for 10 years (Balyi & Hamilton, 2003).

LTPD has been developed with the 10-year rule firmly in mind. Athletes who choose high performance and finish the first 6 stages of LTPD will complete 10,000 hours of balanced training and competition together with appropriate recovery periods, optimizing their athletic development by the time they reach their early twenties. The 10-year rule underscores a key concept of LTPD: the pursuit of excellence requires a significant time investment over several years, with a progressively greater degree of commitment to training and competition on the part of the athlete.

2. The FUNdamentals

All sports are based on fundamental movement skills and sports skills. Fundamental movement skills are often referred to as the ABCs – Agility, Balance, Coordination and Speed. Fundamental sports skills include activities such as running, jumping, throwing, hitting and catching. Research has demonstrated that children will experience more success and achievement in a sport if they are trained to be physically 'literate' in these skills prior to their adolescent growth spurt. They will also be more likely to pursue lifelong recreational physical activity and maintain greater levels of wellness. 'Physical literacy' is the phrase used to describe basic competency in the movement and sport skills considered essential to every individual's participation in sport and physical activity.

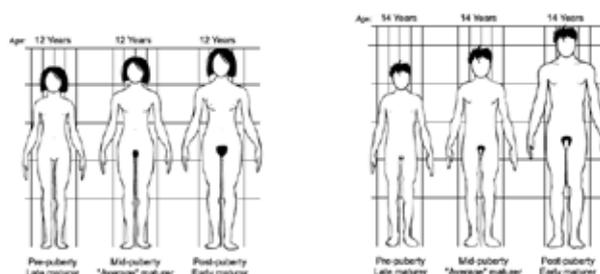
3. Specialization

Some sports require 'early specialization' to obtain elite performance levels, such as gymnastics and figure skating, while other sports see better athlete performance in 'late specialization,' such as basketball, soccer, tennis and table tennis. As a late specialization sport, table tennis relies on the overall sport system (pre-schools, schools, recreation centres, other sports) to assist future players in developing physical literacy during the Active Start and FUNdamental stages. This holds true for speed and suppleness training as well. The science behind LTPD actively discourages early specialization in table tennis (prior to the age of 14 or 15 years) since premature specialization contributes to imbalanced physical development, veruse injuries, early

burnout, and inadequate development of fundamental movement and sports skills.

4. Developmental Age

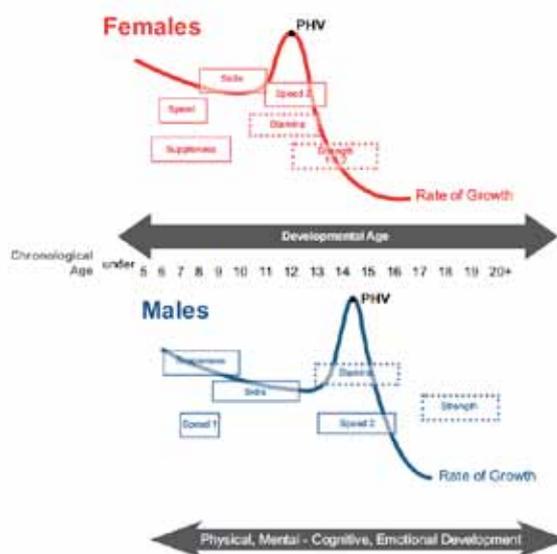
Everyone passes through the same stages of development from early childhood through adolescence, but the timing and rate development vary. This is described as the difference between chronological age and developmental age. Two children may be the same chronological age, but they may be four to five years apart in developmental age. According to LTPD, coaches and administrators need to take developmental age into account when they design programmes for players.



Maturation in Girls and Boys (Adapted from Growing Up by J.M. Tanner, *Scientific American*, 1973)

5. Trainability

Trainability refers to the body's responsiveness to training stimuli at different stages of growth and maturation. The physiological systems of every player can be trained at any age, but there are sensitive periods during their growth and maturation when athletes are especially responsive to specific types of training (e.g., stamina, strength, speed, skill and suppleness). Accordingly, to reach their full genetic potential, players need to receive the right type of training at the correct stage of development. If these sensitive periods are missed, players may grow to be fast, strong, and reasonably skilled, but they may never be as fast, strong, and skilled as they might have been if their training had been timed to coincide with the suggested sensitive periods of trainability. Note: Trainability is often confused with adaptation. Adaptation refers to actual functional and/or morphological changes that occur in an



athlete's body as a result of training (e.g., stronger muscles, better aerobic endurance).

Sensitive Periods for Trainability (Balyi and Way, 2005)

Peak Height Velocity (PHV) in girls occurs at about 12 years of age. Usually the first physical sign of adolescence is breast budding, which occurs slightly after the onset of the growth spurt. Shortly thereafter, pubic hair begins to grow. Menarche, or the onset of menstruation, comes rather late in the growth spurt, occurring after PHV is achieved. The sequence of developmental events may normally occur 2 or even more years earlier or later than average.

PHV in boys is more intense than in girls and on average occurs about 2 years later. Growth of the testes, pubic hair, and penis are related to the maturation process. Peak Strength Velocity (PSV) comes a year or so after PHV. Thus, there is pronounced late gain in strength characteristics of the male athlete. As with girls, the developmental sequence for male athletes may occur 2 or more years earlier or later than average. Early maturing boys may have as much as a 4-year physiological advantage over their late-maturing peers. Eventually, the late maturers will catch up when they experience their growth spurt.

6. Physical, Mental, Cognitive, and Emotional Development

As players grow from childhood through adolescence, they experience significant changes in their physical, mental, cognitive, and emotional capacities. Coaches and administrators need to consider these changes carefully when they plan training programs and design competition formats. Failure to account for these changes may result in mental or emotional burnout, undue mental stress, anxiety, diminished confidence, and early exit from the sport.

7. Periodization

Periodization refers to creating logical and scientific-based schedules for player training, competition, and recovery. In practical application, periodization sequences training components into years, months, weeks, days and sessions to optimize the athlete's development and performance. Periodization plans should be adjusted at each stage of development to account for player growth, maturation, and trainability.

8. Calendar Planning for Competition

Player development is strongly impacted by the competition calendar. Different stages of development and maturation have different requirements for the type, frequency, and level of competition. For example, in the early LTPD stages, an emphasis on training and practice is far more beneficial to the long-term performance of athletes than formal competition. At these early stages, training should be given greater emphasis, and short-term success in competition should not be a major goal. As players progress through the LTPD stages, training-to-competition ratios are adjusted to serve their level of maturation and their long-term needs, whether competitive or purely recreational. Calendar considerations become especially important for our top junior players as they start to encounter the strain of being involved in both domestic and international competitions.

9. System Alignment and Integration

LTPD recognizes that each athlete's development is affected by the variety of different training environments they experience – such as club programs, recreational sports, physical education programs, and school and university teams – as well as the activities of their local, regional, provincial, territorial and national associations. They are also impacted by the availability of facilities and support from sport health professionals. To optimize player development, LTPD asks that these different groups and institutions work cooperatively to serve the best interests of the athletes, ensuring that they are mutually supportive, clear in their roles and responsibilities, and aware of how they contribute to athlete development. Players will best develop in a coordinated sport system that is clearly defined, logically structured, and based upon consistent principles. In addition, LTPD will allow players to identify the opportunities available to them and to understand the pathway they need to follow, whether their aim is long-term excellence or simply remaining active for life.

10. Continuous Improvement

LTPD is based on the best available research in sports science and the best practices in athlete training around the world, but sport science is always being refined. Consequently, LTPD programming should respond to new scientific research to ensure the latest advances are incorporated into training, competition and recovery regimens and formats. LTPD can also initiate new research based on identified needs or issues. In the larger sport community, LTPD should support education, promotion and advocacy for player development with government, media, educators, parents, coaches, administrators and sport scientists.

Trainability and the 10 S's

When considering the key factor of Trainability, LTPD looks at 10 S's of training which must be integrated into training and competition plans. The 10 S's include five physical capacities: stamina (endurance), strength, speed, skill and suppleness (flexibility). Beyond these five physical capacities, there are five general S's that complete a holistic training program: (p)sychology, structure/stature, sustenance, schooling and socio-cultural. Each of these capacities is trainable throughout a player's lifetime, but there are clearly sensitive periods when each capacity benefits most from training.

These sensitive periods of trainability vary between individuals according to their unique genetic makeup. While the sensitive periods follow the general stages of human growth and maturation (see diagram, Sensitive Periods of Trainability), scientific evidence shows that humans vary considerably in the magnitude and rate of their response to different training stimuli at all stages. For example, some athletes may show potential for excellence by age 11, whereas others may not indicate their promise until age 15 or 16.

Consequently, a long-term approach to athlete development is needed to ensure that players who respond slowly to training stimuli are not deprived of opportunities. If players are to reach their genetic potential, correct training must be provided during these sensitive periods of trainability. Again, all of the S's can be developed at any stage or age, but the sensitive periods provide the best opportunities for the greatest gains in the long-term development of the athlete.

1. Stamina (Endurance)

The sensitive period for training stamina occurs at the onset of Peak Height Velocity (PHV)¹, commonly known as the adolescent growth spurt. Athletes need increased focus on aerobic capacity training as they enter PHV, and they should be progressively introduced to aerobic power as their growth rate decelerates.

2. Strength

There are two sensitive periods of trainability for strength in girls: immediately after PHV and during the onset of menarche. Boys have one sensitive period beginning 12 to 18 months after PHV.

3. Speed

In both boys and girls, there are two sensitive periods of trainability for speed. For girls, the first sensitive period occurs between ages 6-8 years, and the second period occurs between 11-13 years.

For boys, the first sensitive period occurs between ages 7-9 years, and the second period occurs between 13-16 years. During the first sensitive period, training should focus on developing agility and quickness; during the second period, training should focus on developing the anaerobic lactic energy system.

4. Skill

Girls and boys both have one sensitive period for skill

training. For girls, the period is between ages 8-11 years, while in boys it is 9-12 years (Learning to Train stage). During this period, young athletes should be developing physical literacy – that is, competence in the fundamental movement and sport skills that form the foundation of all sports.

5. Suppleness (Flexibility)

The sensitive period of trainability for suppleness occurs between ages 6-10 years in both girls and boys. However, special attention should also be paid to flexibility during PHV.

6. (P)sychology

Sport is a physical and mental challenge. Maintaining high levels of concentration while remaining relaxed with the confidence to succeed is a skill essential to long-term performance in any sport. Possessing 'mental toughness' while training and competing under extreme pressure and duress is especially important to success at the high performance level. At the same time, these mental skills also enhance everyday life.

7. Structure / Stature

This component describes the six stages of growth in the human body and links them to the sensitive periods of accelerated adaptation to training. Stature (individual height) is measured before, during, and after maturation to track the developmental age of the athlete. By tracking developmental age, coaches can identify the sensitive periods of skill acquisition and physical development (endurance, strength, speed and flexibility) and adjust training programs accordingly.

8. Sustenance

Sustenance recognizes a broad range of components that serve the central purpose of replenishing the body, thereby preparing the athlete for the volume and intensity required for optimal training. Sustenance addresses several areas: nutrition, hydration, rest, sleep, and regeneration. As with problems in overtraining or over-competition, failure to address sustenance can lead to player burnout.

9. Schooling

Each player's school needs must be considered in the design of training and competition programs. Not only should school sports and physical education classes be taken into account, but also academic loads and timing of exams. When possible, training camps and competition tours should complement, not conflict with, the timing of major academic events at school. Coaches should monitor potential overstress in their athletes resulting from schooling, exams, peer groups, family, and boyfriend or girlfriend relationships, as well as increased training volume and intensities. A good balance needs to be established between all factors.

10. Socio-Cultural

Sport activities expose players to various forms of social interaction and stress, beginning with their participation at the community level. Eventually, their participation may also lead them to international travel and multicultural experiences if they pursue high-performance competition. For example, table tennis is played on five continents

and the game is becoming increasingly popular in Latin America and Asia. Even at the Under 19 level, South African players need to be comfortable with travel and competition in foreign countries.

At the same time, their socio-cultural experiences are valuable in broadening their social perspective and understanding, including ethnicity awareness and national diversity.

Accordingly, socio-cultural activities may be integrated within competition travel schedules, where recovery periods might include education about the competition location, such as history, geography, architecture, cuisine, literature, music, and visual arts. With planning and foresight, table tennis can offer much more than a simple commute between hotel room and field of play – it can develop socio-cultural awareness and enrich the lives of our players.

Other Considerations in Trainability

Children, youth and adults may begin playing table tennis after the sensitive periods of trainability for speed, skill, and suppleness have past. These individuals are therefore dependent on schools, recreation programs, and other sports to stimulate development of these capacities. LTPD recommends that table tennis groups build relationships with these institutions and organizations to promote and support appropriate training. If table tennis players have missed these sensitive periods of trainability, coaches will need to design individualized programs to remedy any shortcomings.

Table Tennis LTPD Stages

Rationale

The Long-Term Player Development (LTPD) model for table tennis presents a systematic approach to the delivery of all key facets of the game. It is designed to maximize each participant's potential and involvement in the sport by providing an overarching vision and a guide to programming content. The LTPD framework aims to help our table tennis players reach their full potential by defining optimal training, competition and recovery throughout their careers. At the same time, it supports their development in athletics in general, and it helps them to pursue lifelong participation in overall healthy activity. For young table tennis players prior to the Training to Train stage, the emphasis will be on physical literacy. "Training" will focus on learning the ABC's of athleticism (Agility, Balance, Coordination and Speed) to teach players how to control their bodies. For this reason, children may take part in exercises that do not look relevant to table tennis but are supporting their development. Games and other sports will teach them to throw the ball (basic hitting actions), catch it (hand-eye coordination), and run properly. At each subsequent stage, children will be trained in the optimal systems and programs to maximize their potential as table tennis players and as long-term participants in sport.

Starting at the Training to Train stage, young players will begin to specialize in table tennis and the ancillary capacities required for competition at the highest levels of the game. Because table tennis is a late specialization sport, LTPD discourages early specialization (i.e., prior to the age of 14-15 years) since premature specialization contributes to imbalanced physical development, overuse injuries, early burnout, and inadequate development of movement and sports skills. Celebrity athletes in many sports have attributed part of their success to having participated in different sports and activities at a young age, saying that the variety of activity gave them a wider base of athleticism and sports skills. LTPD encourages our table tennis players to reach their maximum potential by training and enhancing all the athletic skills and capacities that contribute to their success.

At the same time, we are also trying to provide our players with the range of skills and capacities needed to take part in physical activity throughout their lifetimes. We are looking further into the future than teaching the skills to win games or tournaments tomorrow, especially when an overemphasis on competing may have a detrimental effect on them taking part at a later age. The main objectives for each stage are outlined below and these stages can be used as a helpful guide for parents, players and coaches to know the requirements needed for the player at their age.

Guiding Principles

LTPD has been developed according to guiding principles that respect a player-centered approach and South African realities, as well as a clear focus on long-term performance:

- A 'Made in South Africa' approach that recognizes international best practices and research but

clearly understands the cultural, social and political factors that make the South African sporting landscape unique.

- Supporting the four goals of the South African Sport Policy – Enhanced Participation, Enhanced Excellence, Enhanced Capacity, and Enhanced Interaction.
- Contributing to and promoting a healthy, physically literate nation whose citizens participate in lifelong physical activity.
- Ensuring that optimal training, competition, and recovery programs are developed, provided, and accessible throughout a table tennis player's career.
- Respecting the physical, mental, emotional, and cognitive development of children and adolescents.
- Establishing physical literacy among participants, upon which specialized sport excellence can be developed through community recreation and sport/club programs.
- Recognizing the need to involve all South Africans in the LTPD process, including athletes with a disability.
- Recommending an optimal competition structure that is appropriate for the various stages of a table tennis player's development.
- Optimizing the involvement of all members of the sport, including participants, parents, coaches, officials, specialist consultants, schools, table tennis clubs, community recreation programs, provincial table tennis organizations, SATTB, municipalities, and all levels of government. The role of international-level stakeholders should also be recognized, such as the World Table tennis Federation, Professional Table tennis Player's Association

Stage Descriptions

The LTPD model is split into sequential stages in which players move from simple to more complex skills and from general sport to table tennis-related skills. The following pages set out recommended training sequences and skills development for participants from the Active Start stage (6 and under) to the Active for Life stage (adult participation and recreational competitive streams). Each LTPD stage description addresses the physical, mental, emotional and technical needs of the athlete as they pass through each stage of development.

The first three stages of LTPD encourage physical literacy for all players, regardless of their abilities or disabilities, and correspond to the ages prior to the adolescent growth spurt (PHV). Stages four, five, and six focus on developing excellence and correspond to PHV's onset and aftermath. Stage seven encourages lifelong physical activity, and players may choose to enter this stage at any time in their life (though ideally after the Learning to Train stage has been completed, so physical literacy has been established).

Active Start

Ages Birth - 6 males and females

Key Objectives

Fun and participation with emphasis on the development of fundamental movement skills and the ABCs (Agility, Balance and Coordination)

Where does development happen?

Home, Nurseries, crèches, day-care, pre-school

Who is involved?

Parents, care-givers and teachers

And family members

Total hours of activity

Provide 30-60 minutes a day of organized physical activity. Provide at least 60 minutes a day of unstructured physical activity or active play.

Children at this age should not be sedentary for more than 60 minutes a day (unless sleeping).

Activity

- There is no specific training to competition ratio for this stage, as there is no formal competition, only fun play. Instead, children should be engaged in play for a length of time suitable to their age.

Periodization

- No formal periodization.

Technical

- Introduce children to the table tennis environment.
- Encourage unstructured play off the table tennis board [ball skills activities].
- Focus on developing the fundamental movement skills (e.g., running, jumping, hitting).
- Emphasis on fundamental movement skills linked together into active play.
- Players should participate in a variety of additional physical activities.
- Fun football, cricket as well as fun gymnastics programs are recommended to enhance the full range of basic movement skills and physical development and growth.

Tactical

There are no tactical requirements at this stage.

Physiological/Physical

- The Active Start stage is marked by the child's initial high growth rate, as well as rapid nervous system and brain development.
- General locomotion skills are being established (walking and running), and there is obvious improvement in hand-eye coordination and overall movement sequence as children near the end of this stage.
- Physical activity will enhance bone and muscle growth, promote a healthy weight, improve posture and maintain an overall fitness level.
- Parents and care givers should provide opportunities for children to engage in a wide range of movements and physical play involving movement.
- Gymnastics is an ideal Active Start activity.
- Agility, balance, coordination and "quickness" are cornerstones of physical development at this stage.

Psychological

- Introduce basic mental skills with fun, simple activities such as focusing (e.g., focus on objects and try to remember things about them) and relaxation (e.g., try to tense and relax specific parts of the body).
- Initiate imagery use with simple games involving the imagination (e.g., imaginary table tennis rallies).
- Also introduce modeling with games like follow the leader (e.g., swing mechanics and movement).

Ancillary Skills (Additional skills)

- Ancillary skills are not taught to children at this stage, as they generally include instruction in nutrition, time management,
- career planning and relationship skills.
- Instead, parents and care givers should concentrate on providing sound nutritious foods and adequate water intake.

Competition

- There is no formal competition at this stage.
- Simple play is structured through fun programmes.
- Focus is on involvement of all players and mass participation (MPP)
- Emphasis is to learn through fun activities.

Equipment

- Hoops, bean bags, cones, fun balls, bats / paddles,
- Equipment at this level is used mainly for fun activities

FUNdamentals

Ages 6-8 girls; 6-9 boys

Key Objectives

Fun and participation with emphasis on the development of fundamental movement skills and fundamental sport skills.

Where

Home, Clubs, schools and community recreation centres.

Who

Parents and family members, Club coaches/professionals, teachers and community centre instructors.

Total Hours of Fun activity & training

Participate in daily unstructured physical activity. Participate once or twice a week in preferred sport (if one exists) but also participate in many other sports 3 to 4 times a week.

Training Activity

- No specific ratio. Children should be encouraged to compete with themselves (e.g. how many continuous hits in a row? Keep a rally going for a specified time period, hit targets for points, etc.).
- Children should also participate in a number of sports to help develop all fundamental movement skills, and they should also have daily unstructured physical activity.

Periodization

- No formal periodization. Activities should be planned around the school year.

Technical

- Develop the fundamental movement skills through a variety of activities.
- Emphasize fun and the ABCs (Agility, Balance, Coordination, Suppleness).
- Develop striking skills with bat and ball.
- Introduce sport numeracy through a scoring system (e.g., points for hitting targets). Use actual scoring system. Use shorter scoring games. e.g. up to 5 points instead of 11 in a game.
- Focus on developing physical development by emphasizing fundamental movement skills and fundamental sport skills.

Tactical

- Introduce the main tactics in table tennis e.g. "keep ball on the table" "ensure the serve is good"

Physiological/Physical

- Physical growth is relatively constant, but noticeably slower than the Active Start stage.
- Coordination improves steadily and the nervous system continues to develop rapidly (slowing towards the end of this stage).
- Although aerobic metabolism is primary, low endurance is prevalent in the early part of this stage (but improves noticeably).
- Anaerobic capacity is very limited, and heart rates are significantly higher than adults at all levels, including rest.

- Thermoregulatory control is poorly developed and children are not equipped to deal with hot or cold environments well.
- Skeletal system continues to be fragile with poor loading tolerance.
- Measurable 'reaction time' performance is below that of adults, although coordinated movement speed improves.
- Strength and strength endurance capability rise largely due to nervous system development and coordination improvements.
- There is little potential for hypertrophy (muscle mass increase), so there is no need for formal resistance training programs.

Psychological

- Present young players with the idea of the mind/body connection.
- Introduce the concept of mental skills and their importance in sport.
- Utilize simple, fun activities that focus on controlling anxiety, increasing relaxation, and energizing oneself.
- Use questioning strategies that encourage athletes to use imagery to develop an answer (e.g. what is likely to happen when you hit specific shots from specific parts of the table).
- Parents and coaches should act as role models to support the learning and use of mental skills.

Ancillary / Additional skills

- Parents and caregivers should concentrate on providing sound nutritious foods and adequate water intake.
- Age-appropriate (practical and fun) nutrition education should be encouraged.
- Players should be introduced to warm-up and cool-down, as well as the need for recovery (sleep).

Fun Games/ Competition

- Children play modified game formats that are fun and relevant to their stage of physical development e.g. Top table/"around the table"
- Skill awards can be used to reward player performance.

Equipment

Proper basic table tennis equipment

e.g. Racket/ Bat, practice Balls, full size table and net.

Learning to Train

Male -9-12 yrs Female -8-11 yrs.

Key objectives

Development of fundamental movement skills/co-ordination. Peak motor, co-ordination and skill development before onset of growth spurt. First speed window and development of flexibility.

Where

Clubs, schools and community centre

Who

Club coaches, teachers and community coaches

Key Training Objectives

- Core body TT specific movement skills & footwork patterns.
- Introduce TT specific skills
- Participation in as many sports as possible
- Concentrate on the ABC's (agility, balance & co-ordination)
- Develop hand-eye co-ordination using 'bat skills' activities
- Develop sport specific bat/ball skills
- Early tactics to be simple; attack long and shorter balls whenever possible with accuracy
- Develop touch play using good hand technique
- Develop service & third ball attack
- Develop return of serves using touch, flick and long push to gain control for fourth ball attack
- Introduction to matchplay and participation in specific and planned competition
- Learn how to focus during training/matches

Total Weekly Training

4 – 12 hours

Training to Competition Ratio

- 80% training and 20% competition (including competitive games and competitive drills).
- Tournament play should be introduced, but the focus should be on skill development.
- Consider rule modifications to emphasize skill acquisition.
- Encourage participation in at least 3 different sports to assist in developing a broad range of fundamental sports skills.

Periodization

- Single periodization that features a term-by-term evaluation and progression.

Technical

- Table Tennis-specific skill development.
- Power under control (reduce emphasis on power to emphasize control).
- Basic efficiency (energy flow).
- Consistent grip (within a range).
- Hit the ball varying height, direction, distance, and spin.
- Continue to develop balance and pivot for efficient

court movement.

- Continue to learn overall sports skills in addition to table tennis-specific skills.
- Have a variety of table tennis strokes.

Tactical

- Learn positions of playing: areas of the court and movement patterns.
- Introduce the positioning prior to concepts of offence and defence.
- Introduce the concept of offence and defence.
- The goal of offence is to create space, thus providing the capacity to attack.
- The goal of defence is to restrict space, thus reducing your opponent's capacity to attack.
- A basic understanding of match play

Physiological/Physical

- Females will enter their major growth spurt (Peak Height Velocity, or PHV) towards the end of this stage (plus the possibility of menarche, their first period).
- The male growth spurt typically straddles this stage and the next.
- Overall development of the nervous system is usually approaching the adult stage.
- Although reaction time remains slow, players develop improved motor control.
- Hand-eye coordination allows for better catching and throwing performance.
- Strength and strength endurance capability rises largely due to nervous system development and coordination improvements.
- There is little potential for hypertrophy (muscle mass increase) so formal resistance training is not necessary.
- Performance gains are possible as a result of training, but most gains are simply due to growth.

Psychological

- Parents and coaches should be supportive of the use of psychological skills for both competition and practice.
- Players develop a thorough understanding of the importance of practicing and utilizing mental skills.
- Players are shown how mental states can affect table tennis performance.
- Players learn about positive self-talk, cue words, and re-focusing thoughts to help build and maintain confidence.
- Structured practice sessions are introduced for imagery use as well as other mental skills (e.g., anxiety/arousal control).
- Basic goal setting is introduced with short term goals for practices.
- Initially, players should focus goals on process rather than outcome (e.g., develop better length and tightness on drives).

Ancillary Skills

- Sport and activity programs should be providing an age-appropriate and progressive nutrition education program based upon both the needs of the sport/activity and early adolescence.

- Warm-up, cool-down and recovery activities should be well-defined and integrated into the overall program.

Competition

- Introduce formal game play, applying the correct rules of service and return of service.
- Play with scoring to 11 or 7, or play timed games.
- Introduce players to organized results and playing formats such as ladders, round robins and box leagues.
- Introduce players to tournament play within their age groups and genders: multiple games with match results.
- Tournaments could be one-day events.
- Focus on Novice events (first year participants).
- Participation could be within a club, or there could be community championships for different age groups.

Equipment/ Playing

- Proper racket composition,

Training to Train

Age/Developmental Considerations

Players 12 – 15 years. Onset of growth spurt, emphasis on aerobic and flexibility development. Introduction to strength and muscular endurance training.

Key Training Objectives

- Develop speed, aerobic capacity and flexibility, and ball dynamics
- Develop efficient and effective TT movement patterns
- Increase accuracy, range of strokes and shot selection
- Develop anticipation and the capacity to adapt
- Develop mental preparatory skills to control activation level and focus
- Learn from defeats and how to deal with pressure points
- Specific and targeted competition to apply tactical/technical and mental skills
- Awareness of sport nutrition

Where

Clubs and Provincial programs (academies), schools and community recreation programs, and home

Who

Provincial coaches and club coaches and professionals (school coaches), and family

Total Weekly Training

12 – 15 hours

Training to Competition Ratio

60% training and 40% competition (tournament participation increases). Although players may select table tennis as their main sport, it is important for them to maintain participation in one other sport. Introduction to national competition may occur at this stage depending on the developmental age of the player.

Periodization

Single periodization that features a term evaluation and progression.

Technical

- Focus on developing table tennis-specific skills.
- Increased emphasis on-around the table movement.
- Continue to acquire and perfect the ball striking fundamentals of Height, Speed, Distance, Direction and Spin.
- Continue to work on error correction.
- Skill award programs.

Tactical

- Establish the importance of recognizing strengths and weaknesses of yourself and your opponent as an advantageous tool.
- Begin to develop pattern recognition skills.
- Identification and correction of tactical and strategic errors in play.

Physiological/Physical

- This stage presents the maximal growth rate for both females and males.
- Females typically experience increased body fat levels in response to hormonal changes.
- Menarche usually occurs about 12 months after peak height velocity (PHV), the greatest rate of change in height.
- PHV usually occurs between 11.5 - 12.5 years of age in females and around 14.5 years in males.
- During PHV (the 'growth spurt'), the typical growth sequence begins with feet and hands, and then moves to legs and arms.
- As with earlier stages, the skeletal system remains fragile, particularly the long bones.
- Performance is likely to be compromised by the affects of rapid growth on coordination, relative and absolute strength, and speed and endurance.
- However, this stage is sensitive to developing aerobic capabilities and suppleness (flexibility). Also, towards the end of the stage, gains can be made in strength and speed-endurance by emphasizing those capacities in training.

Psychological

- Athletes should have structured, planned psychological skills training sessions in their training schedule.
- Encourage regular personal use of psychological skills.
- Optimize quality of play during training sessions by building players' awareness of their best mental performance states.
- Use positive imagery to help refine skills (e.g. imagine how a forehand topspin shot will look and feel when executed successfully) and for motivation (e.g., imagine making a comeback when behind in a game).
- Use both short term and long term goals extensively.
- Introduce outcome goals (e.g. reaching the final in a competition).
- Initiate performance planning and development of pre-competition plans.

Ancillary Skills

- Players continue to learn about nutrition through a progressive educational program that provides practical suggestions for the player's daily lifestyle.
- Warm-up, cool-down and recovery activities should be well-defined and integrated into overall training programs.

Competition

- Club programs include junior interclub league play
- School table tennis
- Travel to other provincial clubs and cities
- Exposure to team play and mixed team competitions
- Provincial and National Squads (near end of stage)
- Provincial Games and South Africa Games (near end of stage)
- Provincial/National/Club camps
- Mentoring Program

Training to Compete

Male 16 – 19 yrs Female 15 – 19 yrs.

Adjustment to all skills following growth spurt. Development peak strength, endurance and speed.

Key Training Objectives

- Refine movement skills
- Continue speed, aerobic, flexibility and strength training
- Improving the ability to anticipate (to take the ball earlier and increase hand speed)
- Learn to compete effectively in a variety of competitive conditions
- Refining personal tactics and an awareness of opponents tactics
- Refining personal style
- Refine preparatory skills and use goal setting to plan training/competition schedule
- Prepare player profiles / progress reports

Where

Provincial and National Training Programs.

Who

Club coaches/professionals, level 1 coaches and Provincial coaches.

Total Weekly Training

15 – 20 hours

Training to Competition Ratio

About 65% training - 35% competition (40% tournament play, 60% practice matches and competitive drills). Players are introduced to international competition (depending on their developmental age).

Periodization

Year-round periodization to include national and international competition schedules, tours and training camps.

Technical

- Maintenance and continuation of physical conditioning and table tennis-specific skills.
- Maximize strengths: refine skill that the athlete has developed to this stage.
- Increase emphasis on performing techniques under pressure.
- Optimize table tennis-specific skills while training to compete.

Tactical

Further develop pattern recognition skills and situation analysis and Game plan strategies.

Physiological/Physical

- Growth in height typically ends in this stage (females 17-18 years, males 19-20 years).
- The presence of testosterone increases the potential for increases in muscle mass (particularly in males), as well as the positive response to speed and power

training.

- All of the athlete's major physiological systems have been established during the early part of this stage, so adult training regimens can be introduced at levels appropriate to the individual's training history and level of development.
- Increase resistance training.
- The skeletal system responds favourably to appropriate training loads and direction.

Psychological

- Continue specific structured and planned mental skills practice sessions (e.g., goal setting, positive self-talk and imagery).
- Players should be self-evaluating their psychological states and performance strategies.
- Enhance mental toughness by improving specific psychological skills (e.g., focusing, relaxing or 'psyching' oneself up) to help athletes manage distractions, increase concentration, and optimize their optimal mental performance state.
- Athletes should use imagery at an advanced level and for all its possible functions (skills, strategies, psyching, coping with challenges, winning).

Ancillary Skills

- Players have adopted clear nutritional program.
- Specific elements deal with training camps, travel, foreign countries and recovery.
- Warm-up, cool-down and recovery activities are well-defined and integrated into the overall program.

Competition

- Club table tennis program
- School and tertiary table tennis
- Provincial and National Teams
- South Africa Games
- Competitive tour
- Provincial/National/Club camps
- Adult Mentoring Program
- World University Championships
- World Junior Championships
- All Africa Junior Championships
- All Africa Games

Training to Win

Male and Female 19 +

Develop optimisation of stamina, strength, speed, skill and flexibility.

Key Training Objectives

- Diagnostic testing to determine individuals priorities
- Optimise technical, tactical, physical and mental preparation skills
- Optimise match analysis techniques
- Opponent analysis
- Emphasis on competition in order to learn to compete under all conditions
- Periodisation important to reduce training volumes
- Fitness training specific to the individual
- Profile/progress information

Where

National and Provincial Training Programs, and home

Who

Qualified Coaches.

Total Weekly Training

20 – 25 hours

Training to Competition Ratio

60% training and 40 % competition. International competition is the major component of the athlete's calendar planning for competition. The athlete must schedule training and recovery around the international calendar.

Periodization

Multiple periodization taking into account national, international competition schedule and world championships.

Technical

- Refine all skills
- Execute technique under pressure
- Optimize key match features under pressure (e.g. variation of spin, speed, placement and trajectory)
- Refine all skills- reinforce them- adapt them where possible
- Maximize table tennis-specific skills while pursuing podium finishes

Tactical

- Develop a personal technical game profile
- Develop qualitative skill to improve the outcome (general table observations, awareness)

Physiological/Physical

- The player's physical systems and structures continue to mature.
- Training is likely to move to highly individualistic and high performance table tennis-specific preparation.
- Multi-year and single-year planning will be required to ensure optimal management of the player's training-competition-recovery schedule.
- Regardless of the stage in the training-competition

recovery schedule, an underlying 'base' of physical capacities will be maintained at all times.

Psychological

- Players should be aiming for complete mental toughness and full psychological awareness.
- Focus on performing under pressure.
- Players demonstrate full self-control over emotions and an ability to deal with distractions or difficult/unforeseen situations (e.g., playing with minor injuries, breaking a bat).
- Players show an ability to control self confidence and keep it at optimal level (i.e., confident but not over-confident).
- Players continue to have both short- and long-term goals that are specific and attainable.
- Unforced errors should be at an absolute minimum.
- Players use advanced imagery for all settings and purposes.
- Players completely focus on their table tennis performance and winning.

Ancillary Skills

- Clear nutritional strategies are in place.
- Specific elements deal with training camps, travel, foreign countries and recovery.
- Warm-up, cool-down and recovery activities are well-defined and integrated into the player's overall program.

Competition

- National Senior squad
- National Senior team
- All Africa Games
- African Games
- Commonwealth Games
- World Championships (Senior)
- Olympics

Equipment

- To suit the player's game (racket)
- Attire and shoes
- Sponsorships

Active for Life

Any age

Key Objectives

Healthy lifestyle for life, Active involvement in table tennis (retention and adult onset or initiation).

Where

Clubs and community recreation programs.

Who

Club coaches/professionals and community recreation instructors.

Training to Competition Ratio

- Specific to each individual. The ratio is dependent on individual goals.
- Masters level competition is an integral part of table tennis in South Africa.
- Many age group athletes will follow training to competition ratios similar to competitive athletes as they prepare for National and International age group competition.
- A significant number of players will not adopt a specific ratio and continue to participate in the sport of table tennis as part of their commitment to healthy active living.

Periodization

None specified for this stage.

Technical

Technical development will be dependent on the athlete's past experience, current desire and goals.

Tactical

Tactical considerations depend on the goals of each player.

Physiological/Physical

- Largely an issue of keeping active for life.
- Different players may have specific objectives (competitive or not).

Psychological

- Encourage an awareness of the mind/body connection.
- Avoid negative self-talk.
- Encourage regular participation through goal setting.
- Develop focusing and relaxation techniques to help maintain concentration and control arousal levels in match play.
- Use imagery to reinforce physical skill acquisition, enhance strategic play, and to help motivate.
- Goal setting will be dependent on the individual table tennis player's level of competition.
- Players competing in Masters table tennis tournaments should follow the same steps as the younger competitive players.

Ancillary Skills

- Players maintain general habits and practices aimed at maintaining a healthy lifestyle.

- Specific interventions may be taken depending upon level of play and other individual requirements.

Competition

- World Masters Games
- Provincial and National age groups
- Interclub
- National, Provincial and Regional
- Coaching, officiating and volunteering
- Doubles

LTPD Support Programmes

Long-term development of coaches

LTPD relies on the support of our coaches, officials, clubs and associations throughout the integrated sport system of table tennis. It requires the understanding and support of parents, caregivers, teachers, health practitioners and sponsoring agencies who form part of this overarching table tennis system. LTPD requires that we align the activities and influence of all of these stakeholders with the needs of the player at each stage of LTPD.

First and foremost, to help our players develop to their maximum potential, we need to provide them with quality coaching. Accordingly, as we align our training programs with LTPD principles and best practices, we need to ensure that our coaching development programs incorporate LTPD concepts and practices. From the community grassroots level to the national level, we need to align the training of our table tennis coaches with appropriate levels within SATTB so that our players receive the correct guidance at each stage of their development in the sport.

LTPD Stage	Player Pathways	Coaching Certification
Active Start	One pathway for all participants – playful activity	Club /School / Community Coach workshop
FUNDamentals	One pathway for all participants – FUN play	SATTB Introduction to Table Tennis
Learning to Train	One pathway for all players – skills acquisition with emphasis still on fun	SATTB Introduction to Table Tennis SATTB Intermediate Coaching Course
Training to Train	Players in this stage are moving towards specialization in table tennis. Other players have moved to the Active for Life stream.	SATTB Intermediate Coaching Course SATTB Introduction to Competition
Training to Compete	Players in this stage have specialized in table tennis. Some players may move to the Active for Life stream	SATTB Introduction to Competition SATTB Competition Development
Training to Win	Players in this stage are highly specialized in table tennis and aim for podium finishes.	SATTB Competition Development
Active for Life	Players have a range of goals in playing table tennis – some purely recreational, some competitive.	SATTB Introduction to Table Tennis SATTB Intermediate Coaching Course

Long-term development for Technical Officials

To develop a correct understanding of the game, our players need to have quality officiating at those LTPD stages where competition becomes integral to their development in the sport. Accordingly, as with our coaching development programs, we need to align the training of our officials with the needs of LTPD competition. We want to ensure that our players learn the game with correct officiating, we want to safeguard the capacities of our officials at all levels of the game as new officials enter the system and others exit, and we want to safeguard the international presence of South African officials in table tennis.

LTPD Stage	Role of Match Officials	Certification Required
Active Start	No formal matches.	Adult with PSO Community Coach workshop.
FUNDamentals	No formal matches.	Adult with PSO Community Coach workshop or SATTB Introduction to Table Tennis.
Learning to Train	Officials regulate match play. No instruction to players.	Table Tennis South Africa Provincial or National Examiners through rules clinics. Most matches will be refereed by peers or adults.
Training to Train	Officials regulate match play. No instruction to players. Continued instruction in rules and officiating.	Some matches will be refereed by peers, adults, or Table Tennis South Africa D4 or higher level referees. Key matches refereed by Table Tennis South Africa C3 or higher level referees. Minimum B1, Provincial or National Examiners through specially organized official training and/or individual tutoring.
Training to Compete	Officials regulate match play. No instruction to players. Advanced instruction in rules and officiating.	Early tournament round matches will be refereed by peers or Table Tennis South Africa D4 or higher level referees. Later tournament round matches refereed by Table Tennis South Africa B2 or higher level referees Regional, or International Referees.
Training to Win	Officials regulate match play. No instruction to players.	Matches refereed by Table Tennis South Africa B2 or higher level referees, Regional, or International Referees.
Active for Life	Officials regulate match play and may instruct players in correct rules.	Matches will be refereed by peers or Table Tennis South Africa D4 or higher level referees

Leadership and Succession

To ensure the successful implementation of LTPD and its continuation in years to come, Table Tennis South Africa and Provincial/Territorial table tennis organizations need to work together to exercise leadership in LTPD initiatives. LTPD requires coordinated efforts at the national, provincial, territorial and regional levels to implement LTPD guidelines in coaching, officiating, competition, and ongoing development of facilities and programming. This work cannot be achieved without cooperation between table tennis leaders, organizations and clubs at all levels of the game in South Africa.

A number of opportunities and challenges might be addressed:

- Creating a strategic organizational structure of table tennis across South Africa.
- Planning for succession in table tennis leadership and LTPD implementation at all levels.
- Promoting table tennis domestically and internationally (e.g., Olympic initiative for table tennis).

To encourage greater cooperation and effective action between all table tennis stakeholders, it may be beneficial to perform a review of the governance structure for table tennis in South Africa.

LTPD Resources for Provincial Affiliates, Schools and Clubs

LTPD demands a certain amount of sophisticated understanding among players, coaches, parents and administrators to appreciate the principles of physical maturation and best practices in training.

To promote this level of understanding and an appreciation of LTPD's purpose and importance, quality resources and information materials need to be readily available for players, coaches, parents and administrators from the provincial level to the club and community level. Part of the implementation plan for LTPD requires that a variety of suitable information materials and resources are developed for provincial table tennis organizations and clubs to be distributed and made accessible to coaches, administrators, parents and players.

Competition

Competition plays a critical role in the development of our players. How we define the role of competition and the specific formats at each stage of LTPD will dramatically impact the development of their skills, tactics and mental capacities in the sport. It will also affect their enthusiasm for the game, as well as their relative success and longevity in the sport at all ages regardless of whether they choose high performance or simply activity for life. There are several key considerations when scheduling and designing competition at each LTPD stage.

a) Factors in Competition Planning

Training-to-Competition Ratios

The ratio of time spent in training to the amount of time spent competing should be adjusted according to the age of the player, their stage of maturation, and the number of years they have been playing table tennis (i.e., training age). For example, younger players and players with less experience should spend more hours in training to develop skills and physical capacities and much less time in formal competition. As players progress towards the end of the competitive pathway, at stages such as Training to Compete and Training to Win, they should be competing more in order to maximize the adaptation of their skills and other capacities to actual competition settings.

Periodization

Player training, competition and recovery should be guided by periodized plans at each LTPD stage. Periodization allows for cyclical peaking and tapering in training and competition so players do not burn out physically or mentally. Periodized plans will look different at each stage, according to the physical and mental maturation of the players.

Appropriateness of Competition

Competition formats should also respect the physical and mental maturation of players at each stage. Traditionally, most sports have imposed adult competition formats and schedules on child and youth players without considering the vast differences in maturation. Simply put, it may not be appropriate to have 8 year-old players competing in the same type of league or tournament formats as 18 year-old players. As well, it may be more appropriate to host regional competitions at certain ages and stages over national or provincial/territorial events, as travel and accommodation costs quickly become a barrier for many developing players or recreational participants.

Competition Scheduling

In the team setting, table tennis competition schedules can pose challenges for layers and coaches who set out with the best intentions to follow logical periodized training plans, then find that the timing of important competition events conflicts with those plans. In individual competition, it may be easier for players and coaches to select competitions according to the player's periodized training plan, maturation, training age, and unique developmental needs as a player. For example, it might not be useful or appropriate for a player to attend a particular competition simply because she is 'good enough' or qualified; it is conceivable that other factors in her development or training stage may dictate that it would be better to skip the competition or attend another.

b) Competition Review

To ensure that table tennis competitions are serving the best interests of our players, Table Tennis South Africa is committed to reviewing the timing and format of the various competition events across the country and assessing them according to their appropriateness to LTPD.

Competition Schedule

- The domestic season in South Africa currently runs from September to April each year.
- The South African Junior Championship is traditionally held the 3rd week in April.
- The South African Championships (seniors and masters) are traditionally held in the 4th week of April. (Club coaches are averse to hosting either of these events earlier in the season.)
- Major Intern National Junior events are held in the summer and December.

Competition Formats

- Currently, the standard tournament format for all domestic and international events is the same: a match is best 3 of 5, scoring PAR 11.
- Junior age divisions are currently U13 / U15 / U17 / U19. (Until 1998, these were U12 / U14 / U16 / U19, then the age divisions were adjusted by one year due to issues with the 3 year gap between U16 & U19.)
- U10 events?

Squad	Events	Considerations
Junior	<ul style="list-style-type: none"> African Junior Championships (annual) World Junior Championships (bi-annual) 	<ul style="list-style-type: none"> Selection events: 1 east, 1 west, nationals and 2 other.
Youth Training	<ul style="list-style-type: none"> Potential for World University & All Africa Games 	<ul style="list-style-type: none"> Created to maintain relationship with athletes at universities (especially US)
Youth Competitive	<ul style="list-style-type: none"> Potential for World University & All Africa Games 	<ul style="list-style-type: none"> Created to provide continuum of high performance programming from junior to senior
Senior	<ul style="list-style-type: none"> All Africa Games (4 years) World Teams (bi-annual) African Games Commonwealth Games 	<ul style="list-style-type: none"> Engage all senior squad in some national team events Some athletes may be on the team for a long time; we need to be cognizant of succession planning
Masters		

Competition at the Active for Life Stage

- South African table tennis has a well developed Active for Life competition component, as does the sport of table tennis in general.
- Players of all ages and abilities can choose to compete from several graded table tennis events, including leagues, tournaments, and club ladders and box play.
- Open, A, B, C, D, and E/Novice are hosted by most provincial-level competitions, supporting LTPD principles of fulfilling individual potential and lifelong participation.
- The South African Table Tennis Championships have several events at the Masters level: Open, A and Masters. Masters events range from +30 to +75 (increments of 5 years).
- Most masters and seniors players participate in leagues, as well as club ladders and box play.
- Universities and colleges support the competitive development of players, as well as late entry into table tennis as a sport. A significant percentage of recreational players are exposed to table tennis in university and enter the LTPD pathway as adults.

d) Player Monitoring

The training regimens of our table tennis athletes are designed to foster long-term development of many different player capacities. As our players progress through the LTPD model, they are engaged in training and lifestyle practices that affect their fitness, technical skills, tactical awareness, mental capacities and nutrition, to name only the obvious areas. To maximize the efficacy of training, the affects and outcomes of their training need to be evaluated on a regular basis through rational player monitoring protocols.

Evaluation provides coaches and athletes with feedback that can be used to adjust training regimens as necessary. Without this feedback, a player may continue training ineffectively and fail to develop the fitness, skills, tactical awareness and other capacities needed for competitive success.

Talent Identification

Talent identification is a critical part of the LTPD high-performance pathway. Players are generally identified for high performance during the Learning to Train and Training to Train stages, though some may emerge at the ages we associate with the Training to Compete and Training to Win stages.

It is important that we base our talent identification on player talent and skill and not necessarily competitive results. For example, a junior player who has experienced early physical maturation may win competitions because he or she is physically bigger and more powerful than other competitors of the same chronological age, but this player may or may not have the skills to compete well at the senior level when the other players catch up in size and maturation. LTPD attempts to avoid missing the 'late bloomers': those players who might appear less strong at the Junior level but have the potential to emerge as top competitors at the Senior level once they mature.

Currently, South African player talent is identified in 3 ways:

1. Player rankings
2. Results at National Championships
3. Talent identification camps

Coaches and evaluators can collect additional player data for talent identification using a Player Evaluation Form (see Appendix). When combined with player rankings and competitive results at Nationals, the data from Player Evaluation Forms can provide valuable information for making final selections for Junior and Senior National squads.

Coaches may conduct Player Evaluations while attending junior tournaments or during talent identification camps. While observing players compete, most coaches can recognize whether they are ahead or behind the curve for their stage, whether they have a great drop shot or a poor volley. It is important to record these observations in writing so Table Tennis South Africa can continue to monitor player progress and identify talent as it emerges. When National squads are selected, coaches should be able to review Player Evaluation data over a span of 2 to 3 years and see how each player has progressed.

In the interests of feeding our high-performance stream for international competition, South African junior players should be monitored and evaluated at regular intervals to identify potential talent. We are primarily concerned with two age groups:

- **17-18 year-old players in National** competitions.
- **14-16 year old players in Provincial and Territorial** competitions.

In making team selections, coaches and administrators should consider which competitive events are appropriate for identifying talent and evaluating players. They should also consider alternate venues that may exist or be developed for this purpose, as well as the criteria used in selecting players for Provincial and National Squads.

Implementing LTPD in South Africa

Roles, Responsibilities and Action Plans

LTPD provides a rational and complete approach to achieving table tennis goals ranging from high performance to lifelong wellness through participation in recreational play. However, it is clear that implementing LTPD will have significant implications for every facet of the table tennis 'sport system' in South Africa.

Implementing LTPD will require adjustments at every level of South African table tennis, and table tennis stakeholders will need to make concerted efforts to educate parents, coaches, and administrators in LTPD principles. Clubs and leagues may need to change competition formats for some age levels, coaches may need to adjust their training regimens and philosophies regarding competition, and administrators will need to demonstrate accountability in their roles. Support for LTPD implementation will need to come from diverse stakeholders who may have to set aside personal interests for the greater success of South African table tennis as a whole. All the while, implementation must also follow logical planning that accounts for the financial, social and geographical realities of our sport in South Africa. For these reasons and many more, LTPD implementation must be approached with patience, understanding, resolve, and a firm sight on the goal of strengthening our South African game.

LTPD implementation will follow a series of structured Action Plans that detail the strategic objectives of table tennis for each LTPD stage, the actions required to attain them, timelines for taking these actions, and the people and groups responsible for each action. These Action Plans will be developed through discussion with all stakeholders in South African table tennis, periodically reviewed, and published as they are developed.

The successful implementation of LTPD will require clear definitions of stakeholder roles and responsibilities. Without clear definitions, there is potential for confusion, conflict and inaction between stakeholders during implementation. Definition of roles will ensure accountability for each of the strategic objectives; consequently there should be discussion and joint agreement on precisely who is responsible for completing each task.

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Canadian Table Tennis - this manual is based on the format and content of the CTT LTPD manual

Appendix A

Glossary of terms

Adaptation refers to a response to a stimulus or a series of stimuli that induces functional and/or morphological changes in the organism. Naturally, the level or degree of adaptation is dependent upon the genetic endowment of an individual. However, the general trends or patterns of adaptation are identified by physiological research, and guidelines are clearly delineated of the various adaptation processes, such as adaptation to muscular endurance or maximum strength.

Adolescence is a difficult period to define in terms of the time of its onset termination. During this period, most bodily systems become adult both structurally and functionally. Structurally, adolescence begins with acceleration in the rate of growth in stature, which marks the onset of the adolescent growth spurt. The rate of statural growth reaches a peak, begins a slower or decelerative phase, and finally terminates with the attainment of adult stature. Functionally, adolescence is usually viewed in terms of sexual maturation, which begins with changes in the neuroendocrine system prior to overt physical changes and terminates with the attainment of mature reproductive function.

Ancillary Capacities refer to the knowledge and experience base of a player and includes warmup and cool-down procedures, stretching, nutrition, hydration, rest, recovery, restoration, regeneration, mental preparation, and taper and peak. The more knowledgeable players are about these training and performance factors, the more they can enhance their training and performance levels. When athletes reach their genetic potential and physiologically cannot improve anymore, performance can be improved by using the ancillary capacities to full advantage.

Childhood ordinarily spans the end of infancy – the first birthday – to the start of adolescence and is characterized by relatively steady progress in growth and maturation and rapid progress in neuromuscular or motor development. It is often divided into early childhood, which includes preschool children aged 1 to 5 years, and late childhood, which includes elementary school-age children, aged 6 through to the onset of adolescence.

Chronological age refers to “the number of years and days elapsed since birth.” Growth, development, and maturation operate in a time framework; that is, the child’s chronological age. Children of the same chronological age can differ by several years in their level of biological maturation. The integrated nature of growth and maturation is achieved by the interaction of genes, hormones, nutrients, and the physical and psychosocial environments in which the individual lives. This complex interaction regulates the child’s growth, neuromuscular maturation, sexual maturation, and general physical metamorphosis during the first 2 decades of life.

Development refers to the interrelationship between growth and maturation in relation to the passage of time. The concept of child development also includes the social, emotional, intellectual, and motor aspects.

Growth refers to observable, step-by-step, measurable changes in body size such as height, weight, and percentage of body fat.

Maturation refers to qualitative system changes, both structural and functional, in the child’s progress toward maturity. One example would be the change of cartilage to bone in the skeleton.

Peak height velocity (PHV) is the maximum rate of growth in stature during the adolescent growth spurt. The age of maximum increase in growth is called the age at PHV.

Physical literacy refers to the mastering of fundamental motor skills and fundamental sport skills.

Post-natal growth is commonly, although sometimes arbitrarily, divided into 3 or 4 age periods, including infancy, childhood, adolescence, and puberty.

Puberty refers to the point at which an individual is sexually mature and able to reproduce.

Readiness refers to the child’s level of growth, maturity, and development that enables him/her to perform tasks and meet demands through training and competition. Readiness and critical periods of trainability during growth and development of young athletes are also referred to as the correct time for the programming of certain stimuli to achieve optimum adaptation with regard to motor skills, muscular and/or aerobic power.

Sensitive period of accelerated adaptation to training refers to a point in the development of a specific capacity (e.g., stamina, strength, speed, skill, suppleness) when experience or training has a marked effect on its development.

Skeletal age refers to the maturity of the skeleton determined by the degree of ossification of the bone structure. It is a measure of age that takes into consideration how far given bones have progressed toward maturity, not in size, but with respect to shape and position to one another.

Trainability refers to the genetic endowment of athletes as they respond individually to specific stimuli and adapt to it accordingly. Malina and Bouchard (1991) defined trainability as “the responsiveness of developing individuals at different stages of growth

Appendix B

Training matrix; Physical capacities 1 Training matrix: Physical capacities 3

- A wide variety of physical skills and capacities are required to play table tennis. In high performance competition, the development of these capacities becomes even more critical.
- The following table presents special considerations that should be respected in the physical maturation of athletes at each LTPD stage.
- NOTE: During the Active for Life stage, the training emphasis on physical capacities will vary according to the interests and goals of each player.

Active Start	The child's initial high growth rate slows and body proportions align towards the end of this period. Rapid development of the nervous system and brain weight/size. Motor control and performance highly related to physical senses such as pressure sensitivity and touch. Hand-eye coordination and overall movement sequences visibly and steadily improve. General locomotion skills are clearly established (i.e., walking and running). The skeletal system (including the head/skull) is very fragile and high loading forces cannot be tolerated.
FUNDamentals	Physical growth is relatively constant but slower than Active Start phase. Nervous system development continues rapidly but slows towards end of stage. Coordination improves steadily. Although aerobic metabolism is primary, low endurance is prevalent in early part of stage but improves noticeably. Anaerobic capacity is very limited, and heart rates are significantly higher at all levels than in adults, including rest. Thermoregulatory control is poorly developed and children are not equipped to deal with hot or cold environments well. Skeletal system continues to be fragile with poor loading tolerance. Reaction time is slow, although coordinated movement speed improves. Strength and strength endurance capabilities increase due largely to nervous system development and coordination improvements. There is little potential for hypertrophy (muscle mass increase).
Learning to train	Females will enter their major growth spurt period towards the end of this stage (plus the possibility of menarche - first menstruation), while the male growth spurt typically straddles this stage and the next. Overall development of the nervous system generally approaches the adult state. Although reaction time remains slow, improved motor control and hand-eye coordination permits better catching and throwing performance. Strength and strength endurance capabilities increase due to nervous system development and coordination improvements. There is little potential for hypertrophy (muscle mass increase). Performance gains are possible as a result of training, but growth is the largest contributor.
Training to train	Maximal growth rate for both females and males occurs in this period. Females typically experience increased body fat levels in response to hormonal changes. Menarche likely occurs about 12 months after peak height velocity (PHV - greatest rate of change in height). PHV in females is usually between 11.5 - 12.5 years of age and in males around 14.5 years. During the growth spurt, a typical sequence of growth is feet and hands, then legs and arms. As with earlier stages, the skeletal system remains fragile, particularly the 'long' bones. Performance will likely be impacted by the affects of rapid growth on coordination, relative and absolute strength, and speed and endurance. However, the stage is sensitive to developing aerobic capabilities and suppleness (flexibility). Also, towards the end of the stage, strength and speed-endurance training can be emphasized.
Training to compete	During this period height changes typically end (females 17-18 years and males 19-20 years). The presence of testosterone increase the potential for increases in muscle mass (particularly in males), as well as the positive response to speed and power training. All major physiological systems have been established during the early part of this period and therefore 'adult' and advanced forms of training may be undertaken at levels appropriate to the individual's training history and level of development. The skeletal system responds favourably to appropriate training loads and direction.
Training to win	The physical systems and structure of the athlete continue to mature. Training is likely to move to highly individualistic and high performance table tennis-specific preparation. In addition, multi-year and single-year planning will be required to ensure optimal time management of the training-competition-recovery schedule. Furthermore, it is expected that an underlying 'base' set of physical aptitudes will be maintained at all times.
Active for life	Largely an issue of keeping 'fit for life,' but athletes may also have specific objectives at the individual level, whether competitive or recreational.

Training matrix: Preparation and recovery

- Training and competition put stress on the physical structures of the bodies of athletes. To prevent athlete burn out and ensure healthy, sustainable development of all physical structures and capacities, careful attention must be given to correct preparation and recovery during training and competition cycles.
- The following table presents the types of preparation and recovery activities that should take place at each LTPD stage.

	Physical conditioning and match preparation	Suppleness (Flexibility):	Nutrition, Hydration, and other Regeneration factors
Active Start	No table tennis-specific requirements. Parents and caregivers should provide children with opportunities to engage in a wide range of movements, physical tasks/challenges, and 'play' involving movement. Gymnastics is an ideal Active Start activity and Gymnastics South Africa has specialized programming at this age. The 4 key environments for movement should be introduced during the Active Start stage (on the ground, in the water, and in the air).	Physical activity will support the development of natural flexibility.	Parents and caregivers should provide sound nutritious foods and adequate water intake.
FUNDamentals	No table tennis-specific requirements. This is a critical stage for the development of Physical Literacy. As well, the foundations for many advanced skills are also being established. The physical training aspects of warm-up and cool-down and the need for recovery (i.e. sleep) should be incorporated into activities and education.	Suppleness training should be built into warm-up/cool-down and recovery initiatives, as well as through other activities (e.g., gymnastics, dance, swimming, martial arts, etc). Daily flexibility should be a goal.	Parents and caregivers should provide sound nutritious foods and adequate water intake. Age-appropriate nutrition education (practical and fun) should be encouraged. The physical training aspects of warm-up and cool-down and the need for recovery (i.e., sleep) should be incorporated into activities and education.
Learning to train	Although the overall physical conditioning program and direction will not be table tennis-specific, 'match preparation' should see the young player put into practice the key aspects being taught/ rehearsed/practiced in training (both on and off-board components). These aspects will include warm-ups, cool-downs and recovery elements before matches, between matches (tournaments) and after matches, as well as overall recovery initiatives.	Suppleness training should be built into warm-up/cool-down and recovery initiatives, as well as through other activities (e.g., gymnastics, dance, swimming, martial arts, etc). Daily flexibility should be a goal.	Sport and activity programs should be providing an age-appropriate and progressive nutrition education program based on the needs of the sport/activity and the growing adolescent. Warm-up, cool-down and recovery activities should be well-defined and integrated into the overall program.
Training to train	Physical conditioning through this phase will gradually become more table tennis specific, although there will be a large multi-activity/multi-sport components even at the older/higher levels. All match preparation activities will be highly specific and will reflect those strategies being practiced within the training environment. Be aware of early vs. late maturers.	Suppleness training assumes a prominent place as part of the overall program, with more advanced elements incorporated (PNS and partner work).	Progressive nutritional educational program continues with clear expectations on practical aspects and the implementation of recommendations into the young player's lifestyle. Warm-up, cool-down and recovery activities should be well-defined and integrated into the overall program.
Training to compete	Physical conditioning becomes specific to high performance table tennis, but elements still persist concerning overall athletic development and the particular strengths and weaknesses of individual athletes. All match preparation activities will be highly specific and reflect those strategies being practiced within the training environment. A progressive athlete monitoring program is required throughout this phase. Be aware of early vs. late maturers.	Suppleness training is part of the regular training and recovery program.	Clear and implemented nutritional strategies are in place. Specific elements deal with training camps, travel, foreign countries and recovery. Warm-up, cool-down and recovery activities are well defined and integrated into the overall program.
Training to win	All aspects of preparation and recovery are specific to the lifestyle of a high-performance athlete and the goals of each individual. The format of training, preparation, competition, and recovery leads to establishing targeted behaviours and programs designed, implemented and monitored to ensure optimal competitive performance.	Suppleness training is individualized based on the application of sport science and elite athlete monitoring.	Clear and implemented nutritional strategies are in place. Specific elements deal with training camps, travel, foreign countries and recovery. Warm-up, cool-down and recovery activities are well defined and integrated into the overall program.
Active for life	Largely general practices aimed at maintaining a healthy lifestyle; but with specific interventions as required depending upon level of play and other individual requirements.	Largely general practices aimed at maintaining a healthy lifestyle, but with specific interventions as required depending upon level of play and other individual requirements.	Largely general practices aimed at maintaining a healthy lifestyle, but with specific interventions as required depending upon level of play and other individual requirements.

Training matrix: Psychological skills

- Sport is as much a mental and emotional challenge as it is a physical challenge. The ability to maintain high levels of concentration while remaining relaxed with the confidence to succeed is essential to long-term performance in any sport.
- The following table presents the psychological target skills to be developed at each LTPD stage.

	Psychological skills
Active Start	Introduce basic mental skills with fun, simple activities such as focusing (e.g., focus on objects and try to remember things about them) and relaxation (e.g., try to tense and relax specific parts of the body). Initiate imagery use with low organizational games involving the imagination (e.g., imaginary table tennis rallies on the table tennis board). Also, introduce modeling with games like follow the leader (e.g., swing mechanics and board movement).
FUNDAMENTALS	Present athletes with the idea of the mind/body connection. Introduce the concept of mental skills and their importance in sport. Utilize simple, fun-filled activities that focus on controlling anxiety, increasing relaxation, and the ability to energize oneself. Use questioning strategies that encourage the use of imagery to help athletes develop an answer (e.g., what is likely to happen when you hit specific shots from specific parts of the board?). Parents and coaches should act as role models to support the learning and use of mental skills.
Learning to train	Develop a thorough understanding of the importance of practicing and utilizing mental skills. Create an awareness of how mental states can affect table tennis performance. Present ideas of positive self-talk, cue words, and re-focusing thoughts to help build and maintain confidence. Introduce structured practice sessions for imagery use as well as other mental skills (e.g., anxiety/arousal control). Introduce basic goal setting by developing short-term goals for practices. Initially, focus goals on process rather than outcome (e.g., develop better length and tightness on drives). Parents and coaches should be supportive of the use of psychological skills for both competition and practice.
Training to train	Encourage regular personal use of psychological skills. Have structured, planned psychological skills training sessions as part of athlete's schedule. In order to optimize quality of play during training sessions, table tennis players need to be aware of their best possible mental performance states. Athletes should be using positive imagery to help refine skills (e.g., imagine how a drop shot will look and feel when executed successfully) and for motivation (e.g., imagine making a comeback when behind in a game). Use both short-term and long-term goals extensively. Introduce outcome goals (e.g., placing top 3 at a competition). Initiate performance planning and development of pre-competition plans.
Training to compete	Continue specific structured and planned mental skills practice sessions (e.g., goal setting and imagery). Players should be self-evaluating their psychological states and performance strategies. Enhance mental toughness by improving specific psychological skills (e.g., focusing, relaxing or arousing oneself) to help manage distractions, increase concentration, and enable athlete to be in their optimal mental performance state. Athletes should be using imagery at an advanced level and for all possible functions (e.g., skills, strategies, arousal, coping with challenges, winning). Continue use of goal setting and positive self-talk.
Training to win	Players should be aiming for complete mental toughness and full psychological awareness. Focus should be on performing under pressure, with an ability to demonstrate full self-control over emotions and ability to deal with distractions or difficult/unforeseen situations (e.g., playing with minor injuries, breaking a bat). Demonstrate ability to control self-confidence and keep it at optimal level (i.e., confident but not over-confident). Continued use of both short and long-term goals that are specific and attainable. Minimize unforced errors. Use advanced imagery for all relevant functions. Total focus on table tennis performance and winning.
Active for life	Encourage an awareness of the mind/body connection. Avoid negative self-talk. Encourage regular participation through goal setting. Develop focusing and relaxation techniques to help maintain concentration and control arousal levels during match play. Use imagery to reinforce physical skill acquisition, enhance strategic play, and to help motivate. Goal setting will be dependent on the individual table tennis player's level of competition. Those competing in masters level table tennis tournaments should follow the same steps as the younger competitive players.

Appendix C

Player Development Model

	Level of the Athlete	Responsibilities primary (1), secondary (2) and tertiary (3)
Active Start	Children in active play Competitive Junior	Clubs, schools and recreation programs provide support to schools and early childhood centres with visiting programs.
FUNDamentals	Club / school player - Age 7-18	1. Club - Club to provide coach (likely certified, L1-L4/5) and clinics 2. Provincial Affiliates - To provide support for novice events to encourage grass roots development
Learning to train	Club / school player - Age 7-18 Competitive Junior - Age U13/U15/U17/U19 (competitive age-groups at national events)	1. Club - Club to provide (personal) coach and program 2. Provincial Affiliates - To provide support for competitive events - To provide assistance for recognized junior athletes: junior provincial squad 3. SATTB - To identify junior athletes (U13/U15) for future National Squads
Training to train	SA Games - Age U17/U19 National Junior Squad - Age U19	1. Provincial Affiliates - To provide team coach (min. L3) - To provide camps in preparation for Games 2. SATTB - Provide event for identification of U17/U19 athletes
Training to compete	National Junior Team - Age U19	1. SATTB - To provide National Coach (L4) , administrative support, camps, tours 2. Provincial Affiliates - To provide assistance where possible (e.g., funding for travel to competitive events)
Training to win	- Age 18 ~26 - Ranked top 25	1. SATTB - To provide National Coach, camps, tours
	National Senior Squad - Age 18 - Ranked top 10	1. SATTB - To provide National Coach (L4), administrative support, camps, tours
	National Senior Team	1. SATTB - To provide National Coach (L4) and logistics
Active for life	All ages and levels of ability	1. Recreation programs provide instruction for late entry players. 2. Clubs provide personal coaching and programming for all interest levels. 3. Provincial Affiliates provide competition opportunities.

Appendix D

Player Evaluation Form

Name	
Event	
Evaluator Name	
Date	

Please rank the athlete on each of the areas below using the following 5-point scale.
Please write any additional observations in the Comments section at the bottom of the form.

Legend:

1 Very Weak (Beginner)	4 Strong
2 Weak	5 Very Strong (Junior Squad Member)
3 Adequate	N/A Not Applicable

Area 1: Technical

Forehand Drive	/5
Serve	/5
Backhand Drive	/5
Return of Serve	/5
Forehand Cross	/5
Touch	/5
Backhand Cross	/5
Forehand Drop	/5
Lob	/5
Backhand Drop	/5
Footwork	/5

Area 2: Fitness Area 3: Mental

Hitting Power	/5
Focus	/5
Ability to Adapt to Opponent	/5
Agility	/5
Competition Temperament	/5
Competitiveness	/5
Speed	/5
Competition Temperament	/5
Creativity	/5
Endurance	/5
Board Awareness	/5
Leg Power	/5

Area 4: Comments

Please use the space provided below to provide any other feedback you have on this athlete.
You may also use the back of this sheet.

Appendix E

The inclusivity programme

