

From Young Athlete to High Performance Rugby Player

Long Term Periodization: A Multilateral Path for Success

By Frederick Claro, TBI Training Director (P-PS / JATS)

Periodization-Planning Specialist and Junior Athlete Training Specialist

When we players, coaches and fans marvel at the level of excellence achieved by the players in competition, we always must keep in mind that what we actually see is the result of years of patient training and hard/smart work. As it goes in other disciplines than sport, excellence in achievement is never coincidental, but rather the result of a pyramid of events.

The path to excellence is universal. To follow it is wisdom, but there will be challenges along the way where many will fail mainly because of these two major reasons: attitude and commitment. A champion, no matter the discipline, is the end product of a thorough training chain of events started during childhood under the rules of a multilateral sport development approach. Although there are genetics involved in the process, systematic training and attitude will make the champion/elite player. This is what we shall explore in the following. A sound long term periodized foundation from the childhood stage onwards is paramount to reach peak performance at mature age.

In this article we shall define and learn what a multilateral sport development approach will bring to the athletes. You will be able to understand and name the different stages of athletic development and give a rationale for the periodization of the athletes' motor skills and bio-motor abilities, you will also learn about the relationship between the child and the competition. You will also be able to adapt this knowledge to rugby development in every segment of its development in order to optimize the performances of young rugby players from midi-mini up to high performance level.

Understanding the presented concepts is of the utmost importance to effectively train young athletes and rugby players to the best they can achieve. If this method is followed thoroughly without skipping any steps, it will also provide an alternative to the temptation for artificial substitutes to training along the way and deliver mostly injury free and well prepared athletes.

Too often do we see rugby players with a poor general sport background, which in term, will have a negative impact on the players' development even if those players become committed to training with a purpose. There will be some essential missing links in the chain of development, mainly coming from childhood and adolescence times.

It is now admitted, and not only for rugby, but for any sport, that players who had a multilateral approach to training are the best equipped for success. What is a multilateral approach for sport development? It is to allow young children to acquire a complete set of fundamental skills to become first good general athlete *before* they start to develop in a specific sport. It is one of the very most important training principles for children and youth (Bompa, 2000). Usually these skills were provided through the elementary, Junior

High and High Schools sport curriculum, but in most instances were not sufficient for proper development mainly due on the children's point of view to a lack of understanding of the real value of the skills presented such as running, swimming, jumping, throwing, catching, tumbling, balance, and basic gymnastics. Moreover educational programs are often cutting sport's time to add on an already widely overloaded academics schedule.

By nature, children love physical activities because they mainly live in a world where they constantly improve their motor, psychological and social abilities. Statistically, 80% of children from 8 to 14 years of age consider sport as something very important in their lives (SECED, Research International, Paris, 1980). Moreover, the 3 major reasons cited by children to practice sports are (Gill, Gross, Huddleston, 1983):

- Improve skills and abilities
- Fun
- Want to learn new skills

Gould et al in 1982 found that the 3 major reasons for kids to drop from sports were:

- Other things to do
- I was not as good as I wished to be
- Not fun enough

As we can see from the participant perspective, skills and fun are high on the list, and we could definitively ask ourselves if the drop out responsibility falls on the children or sports educators?

As societies certainly evolved more towards a short term and quick rewarding system favoring marketing and merchandising rather than long term commitment, the way we perceived sport went accordingly. In most countries children specialize far too early in a sport usually as an end result of a heavy marketing strategy to gain market shares (see how top soccer, basket ball, tennis or NFL players are marketed, hence all kids want to be their "hero"), or pushed too early in a specific sport by parents or peers often in a race to exorcise their own past failures. These can only be short term visions, which will not develop champions on the long term.

A Soviet survey by Nagorni in 1978 reported the following facts after an athletes' longitudinal study:

- The vast majority of the best Soviet athletes went through a strong multilateral foundation
- Most athletes started sports practice around 7 or 8 years of age. During the first few years, all of them played various sports such as swimming, gymnastics, track & field, soccer, cross country skiing, cycling, running, skating. Later on at around 12-13 years old, they experienced other team sports such as volley ball, basket ball, and other individual sports: rowing, throwing (shot put, discus, javelin) and jumps (long, high)
- The specialization period started at around 15-17 years old without stopping the earlier practiced sports. Best performances were achieved 5 to 8 years after specialization in the chosen sport.
- The athletes who specialized earlier achieved best performances at junior level. They never performed as well later on passed 18 years of age. Some retired from

- sports before reaching senior level, injured or worn out, and most athletes who specialized early were not able to improve their performances at senior level.
- Many top level soviet athletes started training in an organized environment at around 14-15 years old. They never have been junior champions or hold any records whatsoever. Many of them achieved national and international level performances at senior age

These athletes said that they were successful due to their strong multilateral skill foundation built during childhood and junior age. The study concluded that specialization in a sport should not start before 15 or 16 years of age in most sports, except for female gymnastics and figure skating, where girls reach maturation (specifically with their relative strength/power on which these sports are based upon) earlier.

It is of course important to note that the multilateral approach is motor-abilities development based, not competition based. Once ready, some kids can participate in few competitions keeping in mind the fun aspect of it, and carefully considering this phase as a skill evaluation with peers where the notion of winning should be mostly eradicated. It is of the utmost importance for young rugby players to keep this multilateral approach until the specialization phase (16-17 years old), when nonetheless 25 to 30% of the time given to sport should still remain with other developing sports (Bompa, 2000). Specialization is mentioned here for rugby, inasmuch that rugby becomes the chosen sport, but it also will coincide with the specialization towards a position (or group of positions) within the team.

As a general rule, it is important to keep the training loads very progressive from a young age up always keeping in mind that development is achieved on long term, not abruptly. There is no rush in good systematic training, just everything comes at time. Ideally, children should be physically active for most months of the year and activities could easily be split between spring, summer and autumn with more specific winter activities during that time of the year. Any place should be considered for training motor skills and abilities: basement, garage, open field, stadium, pool, lake, river, or backyard. One doesn't need sophisticated places and equipment at this stage. The load should be implemented with steps on 3 weeks progression cycles (for pre-puberty children, 4 weeks thereafter), using the number of sessions and/or time of sessions as variable volume of training, always managing a good third week of recovery. Remember: it is during recovery that adaptation to training occurs! Not during the training itself which is an induced stimuli to provoke an adaptation. The table below shows how it could be organized with the inclusion of multiple physical activities covering the development of fundamental motor skills. Schools curriculums were traditionally used to develop this fate... But not any longer as far as most western countries are concerned at least not in this efficient form. It became the task of coaches and parents to provide with the variety, ingenuity and the commitment for multilateral development.

Table 1 shows a cycle sample for children at puberty (11-14 years old):

Training Elements	Step 1 1 week	Step 2 1 week	Step 3 1 week	Step 4 1 week
Number of Training Sessions	2/3	3	4	3
Number of Hours per Training Session	1:15	1:30	1:30-2:00	1:15-1:30
Rest Interval between sets of drills or exercises	Standard	Standard	Shorter	Standard

Table 1: Adapted from Bompa, 2000

Sports systems worldwide also classify children through their chronological age which could also lead to developmental issues as most sport science researchers believe that using the biological age as a reference would be more suitable and fair to early and late maturers.

With this in view, the periodization of training from childhood to high performance could be represented as in table 2 below:

Periodization of Training			
Multilateral 6-14 years		Specialization 15 years +	
Initiation 6-10 years	Athletic formation 11-14 years	Specialization 15-18 years	High Performance 19 years +
Pre-puberty	Puberty	Post-puberty & adolescence	Maturity

Table 2: Periodization of long-term training (adapted from Bompa, 1999)

In reference to rugby, as for any other sport, children could certainly start at school or club level from the Initiation stage onwards as part of a broad developmental scheme including all aspects of multilateral development. Specialization should occur for rugby at around 15 years of age, with position specific decision around 17 years old and even older.

Let's now have a look in more details to the content of every stage of development:

- **Initiation Stage: 6 to 10 years old: Pre-puberty**

During that period of the periodization scheme, the children should be involved in low intensity training programs where fun should be emphasized over competition and military style training concepts. Children learn better and

faster when they have fun and play, moreover their attention span is limited and they can't cope with the physical and psychological demands of high intensity training.

During this stage, the children do have a functional cardio-respiratory system and aerobic qualities are developing well. Unlike anaerobic activities for which young children have a very poor tolerance, specifically of lactic acid because they lack the metabolizing enzymes. Growth factors with joints and bones also have to be taken into consideration for strength and power development. Children thrive in action and play. These are the two aspects to build upon when developing new motor-skills over winning and competition spirit.

When designing a program for this stage of development, sport educators should consider these few guidelines:

- Keep the focus of training on the multilateral aspect of the training and introduce a wide variety of motor-skills including running, swimming, jumping, throwing, catching, balancing and rolling. Keep practices fun and play oriented
- Major motor-skills to be looked after for development are: flexibility, coordination and balance. Keep training in a low intensity, low stress environment
- Reinforce positively good behaviors and good skill development
- Games, rules and equipment should be adapted to the children such as time of play, sizes of balls and other equipment, rules of the games, provide flexibility with rules and simplify all played games. Team work should be emphasized through relays and circuit training. Fair play should be emphasized
- Gender differences are irrelevant until puberty, therefore encourage mixed practices with boys and girls and offer all opportunities to let children feel that sports are exciting and fun. The educator mission should be to open the mind of the children to participate in as many sport activities as possible without discrimination

- Athletic Formation: 11-14 years old: Puberty

At this age, children will be able to sustain a higher intensity level in exercise and drills, but they are not "young adults" they have their own path of growth and maturation. Some athletes will go through tremendous growth spurts while others will not, degree of maturation will differ a lot within the same age group. Hormonal patterns will also differ from individual to individual. Scientific studies have shown that 13-14 years old is the time where disparities between male and female start to show (Malina, Bouchard, Bar-Or, 2004) mainly due to the boys increase in muscular mass and strength in relation with testosterone secretion. Training sessions should then be separated.

Here are some guidelines to help educators to design optimal development programs within the scope of multilateral periodized training:

- Drills can start to be designed for tactical as well as technical development. Drills and exercises should be as various as possible within chosen sport and also the other sports. Intensity and volume of training can be increased without overdoing it. Fun must still be emphasized
- Athletes should refresh the skills previously learnt and learn new motor-skills to keep motivation intact and develop general skill automation
- Flexibility, coordination and balance are still on the agenda with more complex drills and exercises
- Athletes are introduced to competition on a more regular basis, but with the specific understanding that development is the major focus, not winning. Cognitive development at these ages helps children to understand more about what is asked from them. Given the right environment they will thrive and pursue the right goals and values
- Continue to develop the aerobic capacity of athletes with various means such as running, swimming (excellent as it increases aerobic capacity in a very low impact environment) and technical drills
- Anaerobic alactic training can also be more developed with sprints up to 80m with adequate rest intervals. An introduction to lactic acid work could be foreseen specifically through technical or tactical training, avoiding events such as 200, 400 and 800m track sprints and races
- More controversial is the introduction of general strength development. It has been a highly discussed topic among researchers in the last few years to know if strength training is adequate at this age. It is now generally agreed that the foundation for future strength and power gains should begin during this stage of development (Bompa, 2000). Of course exercises should be adapted, but it is the best time for introducing to young athletes the basics of core body development, specifically hips, abdomen, lower back, extremities and joints with ligaments and tendons anatomical adaptation. Exercises at this stage should emphasize body weight, medicine balls and light dumbbells. Focus being on proper execution technique
- Avoid competition placing too much physical and psychological stress
- Psychological aspects can be introduced such as concentration and mental imagery, introduce athletes to more complex technical and tactical drills
- Basic sport nutrition facts should be brought to light
- Provide as much time as possible for play and socialization. Children in general and adolescent in particular have affinities for getting attention from peers and adults. Social competency which concerns the relationship of the child with his/her peers is of paramount importance. They will always try to have many friends, enjoy time with each other and try to be someone important within the group be it in the class, school or club (Harter, 1978, 1982, cited by Durand 1987, 2006)

- **Specialization: 15-18 years old: Post-puberty**

This is where the most changes occur in training as the child growth and maturation processes allow for more intensity and volume. At this stage, if the previous developmental periods have been followed thoroughly, it will be possible to gear the adolescent towards drills and tactics in direct preparation for the high performance level in one sport. Still, educators must accurately dose the volume and the intensity so that development occurs without too many risks of injuries and overtraining.

Still some important features must be respected in order to provide with the maximal optimization of training during this very important period:

- Progressive improvement for the sport (in our case rugby) motor abilities such as power, anaerobic endurance, and specific technical aspects should be closely devised and monitored. One of the major risks at this stage for our athletes is over reaching and overtraining
- Now is the time to address some specific requirements for rugby so the players will progressively adapt to the higher demand of training and competition
- Training should now mirror as much as possible what the players will face in games. Intensity of training should be raised, with still a progressive increase of volume throughout the pre-seasons. Technical and tactical training should reach the rhythm and intensity close to what the players experience in games
- Involve athletes and players as much as possible in the decision making process. For rugby players, they should all become a real part of strategic decision made and the game philosophy of the team
- Still other sports should be practiced 35 to 40% of the time
- It is the time for athletes and player to also develop more strength for core body and prime movers. Loads are heavier but never superior to 80% of 1RM, emphasis is put on good movement and technique in total preparation for Maximum Strength (MxS) and Power development to come in the next step up
- There is now a need for more in-depth sport nutrition advises
- Aerobic capacity can be more developed. Now time has come to work on VO₂max, vVO₂max as well as increasing the intensity of anaerobic training. Players can now cope better with lactic acid build up
- Fundamental technique should now be automated and the refinement of specific rugby techniques is coming to order. The aim will now be to get the players to perform efficiently on both biomechanical and physiological point of views. It is the stage where technique becomes fully integrated with tactics, and where bio-motor abilities gains become more involved in the general training process. The more the players become technically and physically efficient, the more they will have to

practice through the increased pace provided by sound technical, tactical and physical training. The individual improvement of players will be related to their units, hence providing a collective global improvement for the whole team

- Players are also ready for higher tactical and technical stimulation, where quick decision making in game like situations will develop their individual and collective astuteness. Mental training such as visualization and toughness development can be implemented
- Finally, the number of competitions can be progressively increased, still focusing on specific skills, tactics and motor abilities to develop further. In fact, games are just the place where training efficiency is tested... If all parameters fall into place, winning will take care of itself, but again is not the major purpose for competing at that stage. Players AND coaches must remember this: we are still in a developmental stage!

- **High Performance: 19 years old and over: Maturity**

It is the cherry on the cake! Only those who followed a sound long-term multilateral development will reach this stage with their mind, spirit and body forged for what lies ahead. But be aware of one thing: making it to this stage is fine, but players must understand that it actually where it all starts... Thinking of it as an achievement and relax is calling for trouble. From then on, improvement through a sound periodized program season after season, allowing for increase of homeostasis during successive pre-seasons with the minimization of injury chances is the only way of success.

During this long-term multilateral process, these bio-motor abilities must be shaped in order to refine them at a high performance level alongside fundamental motor-skills:

- Flexibility
- Strength and power
- Speed/agility
- Endurance, both aerobic and anaerobic

"A sport performance is the expression of a certain motor ability level" (Durand, 2006). What we take for granted in our adult lives such as running, jumping, catching, throwing a ball took in fact a very long time to refine from early childhood to adulthood. Many qualitative and quantitative researches have been done to study what is called "developmental kinesiology" or the study of the development of motor abilities through life stages.

Briefly, we can resume motor development through the finding (non exhaustive) of Gallahue, 1982, cited by Durand, 1987, 2006. He found that motor development goes through 4 stages:

- Reflex motor abilities (from birth to 1 year old)
- Rudimentary motor abilities (from 1 to 2 years old)
- Fundamental motor abilities (from 2 to 6-7 years old)

- Sport motor abilities (from 6-7 years old onwards)

Different research sources converged to say that roughly the human motor organization is done by the age of 7 years old. At this time, movement will be perfected but patterns are very close to the adult movement patterns (Durand, 2006).

Most of the child's development through the process of learning motor skills for basic and more elaborate motion, including the fundamentals of sport motion is to develop a good coordination. Coordination is the common factor of all movement and action. In addition, balance and agility will be two other important assets for coordination development. A well coordinated and balanced child will gain confidence and certainly will have the very fundamental on which to build upon. A well designed multilateral program will give children these assets. At later stages of the development, strength, speed and endurance will be easier to bring in the program once the fundamentals are set in. Coordination is a mandatory asset for sport excellence, even more so with team sports where players will have to deal with an overload of information to make the right decision at the right time on the field and coordinate themselves in relation to both team mates and opposition players.

Table 3 shows a sample training session for the Initiation stage:

Part & Scope	Training Objectives	Duration
1- Warm up	Jogging, stretching	5 min
2- Coordination/Balance	Hand eye coordination, spatial orientation, simple balance	10-15 min
3- Play, game	Skill development from chosen sport	20-30 min
4- Cool down	2-3 relays, easy stretching	5 min

Table 3: Adapted from Bompa, 2000

Flexibility:

Flexibility training refers to the range of motion around a joint. In sport activities limbs are moving faster than in regular daily activities, and the athletes must be able not only to get the flexibility around the joints to perform well, but also be able to exceed the range of motion required. In rugby for example, passing or kicking the ball demands a preparation of movement, the actual action of passing or kicking and a follow through for maximum efficiency. These actions will need coordination and a good flexibility of the joints in both upper and lower body. Flexibility is a quality to be trained at a young age and to be kept under training as it is known to be easily lost, specifically with boys in the second part of the pubescent growth mainly due to the increase of muscle mass and the resulting stiffness. Two excellent ways to develop and keep

flexibility of the joints is to practice the basics of gymnastic and stretching progressively involving the three methods of static, ballistic and proprioceptive neuromuscular facilitation also known as PNF. For team sports ankle flexibility is of paramount importance and is often overlooked. Rugby is a game of intermittent power bouts where powerful runs are constantly made while changing direction, putting ankle and knee joints under severe stress. Players should develop their plantar flexion and dorsiflexion from early age and regularly. This will prevent many injuries and increase running efficiency.

Strength and Power:

Strength and power should be developed from athletic formation years onwards, progressively and emphasizing proper technique. Until the high performance phase, it will mostly be limited to an anatomical adaptation for preparing the body to sustain the volume and intensity increase of the Maximum Strength (MxS) training loads during High Performance development. What we are looking for here is the smooth preparation of the muscles and the tendons. It will moreover help to prevent injury. Core body strength should be developed first moving towards the extremities at later stages, in no case loads should be heavier than 80% of 1RM prior high performance stage.

The laws of strength training as devised by Bompa in 1999 are important to follow. They state:

- Law #1: Develop joint flexibility
- Law #2: Develop tendon strength before muscle strength
- Law #3: Develop core strength before limbs

Circuit training is certainly one of the best implement for strength development from Initiation to Specialization stages. In the initiation stage, children will develop their strength through various sport practices as well as speed, endurance, balance and good coordination.

Table 4 shows a periodization model for long-term strength training through multilateral approach.

Stages	Objectives	Methods	Volume	Intensity	Means
Initiation (6-11)	<ul style="list-style-type: none"> Simple exercises Games/play 	<ul style="list-style-type: none"> Informal circuit training (CT) 	Low	Very low	Own body weight, partner, light MB
Athletic Formation (11-14)	<ul style="list-style-type: none"> General strength Relays/games 	<ul style="list-style-type: none"> CT 	Low to medium	Low	MB, light free weights
Specialization (15-18)	<ul style="list-style-type: none"> General strength Specificity 	<ul style="list-style-type: none"> CT Power training Low impact plyometrics 	medium and medium-high to maximum	Low, medium	id
High Performance (19+)	<ul style="list-style-type: none"> Specificity 	<ul style="list-style-type: none"> MxS Power/plyometrics Muscular Endurance 	Medium to high and maximum	Medium to high, submaximum	Free weights and machines

Table 4: Adapted from Bompa, 2000

Table 5 shows a periodized strength/power model plan for sport specific (in our case rugby) late Specialization phase (Postpuberty):

Training Phases	Preparatory		Competition	Transition
Periodization of Strength	AA	MxS<80% Power	MxS and power maintenance	AA

Table 5: Adapted from Bompa, 2000

Legend: AA = Anatomical Adaptation; MxS = Maximum Strength

Speed:

Speed is also a common factor of most sports as athletes not only have to run quickly, but they also must react or change direction with great velocity. Speed involves three major elements: reaction time, movement time, and speed of running. All three should be addressed for.

In the early stages, children will develop speed through a neuromuscular adaptation rather than by powerful muscle contractions which will occur during puberty and post-puberty. During initiation stage, speed is developed through games, relays and circuits. They can also run/sprint short distances (10, 15 and 20m). When athletes get involved in team sports, the stop and go nature of the activities makes it a great speed and change of direction enhancer.

From puberty onwards, hormonal changes specifically with boys will induce an increase in muscle mass and force of the muscular contractions, hence the speed gains noticed. From that time on, strength and power development will provide gains in general speed. Specificity will focus on speed endurance and powerful changes of direction in accordance with the player's position specificity.

Team sports and rugby specificity demand players to increase the changes of direction speed rather than linear speed. Both must be addressed in order to develop proper running form, followed by specific rugby speed training. Rugby players should maintain general speed and increase specific speed through circuits and drills with and without the ball. Stop and go, sharp changes of direction training sessions should follow the power conversion phase to specifically adapt the gains to the need of the sport.

Endurance:

Endurance can be defined as the ability to sustain a physical ability for a long period of time. Developing adequate endurance will help cope with the fatigue accumulating during the events. There are two types of endurances: aerobic (where the muscles contract in the presence of oxygen) and anaerobic (contraction without oxygen).

Athletes can improve their endurance as much as 15 to 20% per year in the initiation phase and 5 to 10% reaching the specialization phase (Bompa, 2000). Young athletes develop both endurance while running and playing games, from Athletic Formation onwards, more specific training can be devised including runs, swims, cycling and technical/tactical sessions. During puberty and specifically during growth spurts, adolescents have a great ability to increase their VO₂max. During the Specialization phase, technical and tactical drills run for over a minute will also increase aerobic endurance capacity. Post pubescent athletes and players can start to train more for anaerobic endurance and lactate tolerance as their bodies can now better cope with the accumulation of lactic acid.

All this training has an aim: reaching maximum potential for competition. One of the main features of sport is indeed the competition. It is therefore also important to understand the basics of the relationship between children and the competition.

To look at competition is also to look at its social aspect. We will not extend here too much on this subject as it is not the topic, but one must admit that Human relationship to competition is one of social behavior, mainly shaped by societies and natural Human behaviors. Up to 2 years of age, individual activities are the most dominant, and if a child

plays in front of others, it is mainly disconnected from the surrounding and don't seem to worry about what the others are doing. Between 4 and 6 years old, associative forms of play are most common and the real significant cooperative behaviors arise around 6-7 years of age. Sport competition is about being organized to be efficient. There are rules to be accepted, and children are not geared with the understanding of its complexity. The understanding of the complexity of the competition scheme arises around 12-13 years of age, where the child reaching puberty will construct social interaction habits, understand better the complexity of competition interrelation with peers and will be affectively more stable to handle win and loss situations, exhilaration and deception. For these reasons, some authors are reluctant to introduce too much competition prior this stage (Malina, 1986).

Understanding basic child psychological development is paramount for the efficient integration of a complete multilateral program, where every step will be customized towards the needs of the young athletes and according to their physiological and psychological development. One of the leading experts on child psychology was Jean Piaget who first described in 1932 the slow construction processes of the child's mind. Piaget studied age groups of children playing marble games and how they would react with rules. He found that:

- With young children (less than 2 years of age), that game is primarily individual and involves exclusively their own abilities
- The second phase is a phase of "elder egocentric imitation". Between 2 and 5 years old, group play occur but individuals play for themselves and tend to imitate what the elder do. It appears that there is a total misunderstanding of the rules and the imitation will relate to superficial aspects of the activity
- The third phase, finishing around 10 years old corresponds with an effective use of the rules. The child perceives the rules as a strain to the activity. He sees it as fatality induced by adults or authoritarian entity and nothing can be done about it. Nonetheless the child will accept this external rule
- During the last phase, the child understands that rules are made to preserve equity and fairness. At that stage, the child will freely abide to the rules. From this behavior a true cooperation with the peers will occur, leading to a common acceptance of the limitations paramount to a collective action

In 1984, Barbreau et al used Piagets' results to their own research on children sport behaviors and acceptance of the rules. They found that:

- At 5-6 years of age, sport rules are perceived as external and imposed by authority (adults). Without real utility, children will transgress them without remorse in order to take revenge on an opponent or to achieve the expected outcome. There is no feeling of guilt in doing so
- It is not until 8 or 9 years of age that rules are actually perceived as a solution against the cheating taking place in the games. Children will see rules as legitimate to clean the game from "wrong doings", but they will not see anything wrong to breach the rules for their own purposes. "Rules are good against them but not for us to apply" is the general attitude and feeling, hence denying fairness and equality in front of the law/rule
- For the 11-12 years old children, rules are conventions freely accepted. To transgress them is simultaneously frowned upon and tolerated. Violations of the rules are then seen not as enhancing efficiency but in the name of moral criteria: Children

perceive their own breaking of the rules as balancing oppositions past cheating behaviors. Children claim the right to break the rules as they see it restoring fairness in front of opponents seen as de facto or potential cheaters

We now understand better why competition should be scarce in early childhood and in our developmental program from Initiation until the second part of Athletic Formation. Children need time to get the social bearings to fully accept the rules. Another reason why it is also important to simplify the rules for children, specifically rugby rules, which are not the most simple to understand in the world we have to admit!

Competition will also induce stress. Stress before, during and after the competition. Another good reason we should concentrate on motor-skills and behavioral development rather than winning. We should always keep in mind that we are developing these athletes, result will be important at later stage, but if we train better people in life, we will train better and more confident athletes and players who will in turn thrive in a high performance environment, specifically in managing the related stress better. As a simple rule: the more an athlete had fun in practicing the activity and the less stress associated with defeat for example he/she will experience (Scanlan, Passer, 1978, 1979). Self esteem associated with self confidence is the greatest quality we can develop with young athletes. This will not only help them in sport but it will certainly help becoming better persons in life and socially act confidently. Developing a child self esteem and confidence is one of the most valuable things we can do for them both as parents and educators. In that aspect, competition should be seen as a social tool to produce emotionally and socially sound individual and citizens, not to immediately produce champions!

In numerous countries, sport authorities see children as young adults, and the leading philosophy behind the systems could be resumed as follows: Professional players play 60 or 70 games a year, if you wish to become a pro... You have to do the same thing! We can now see the non sense in such a sport approach and philosophy. Ideally, children in development in the Specialization phase should have a ratio of a minimum of 4 training sessions for 1 game played. Games are meant to apply what has been learnt in training. When do children have the time to learn anything if they play at a higher ratio? Moreover, it is very important to de-emphasize winning and instead really focus on skill and motor abilities development.

When parents or coaches decide to get the children into competition, these guidelines should be clearly kept in mind (adapted from Bompa, 2000):

- Enter children in competition only when they are ready. They must ask for it and also demonstrate a sufficient skill and motor abilities level
- It must be FUN, FUN, FUN, or beware of drop outs!
- The focus remains skill and tactical development
- Discourage children younger than 7 years to participate in organized competition. They can still compete from time to time with their team or club mates intra muros in a less formal and stressful way
- Children will understand the meaning of competition at around 12-13 years of age

In this article we had a look at the multilateral development to lead children to high performance is sport in general and how it can apply to rugby. We saw which training stages are parts of the program and how to manage motor skills, motor abilities development and competition understanding. This approach is what made former eastern block athletes close to irresistible. It is what we as parents and educators owe to our young athletes to give them the best start in life. At the end of the day, creating a champion is not what it is all about. What it is all about is simply training better persons through the means of sport activities. All parameters being equal and programs well developed and followed, best results will come, the question not being "if", but "when"? To reach excellence as an athlete and Human Being takes time and our societies should envision the benefits of such an approach and stop the slaughter of our youth on the altar of short term marketing purposes. Stop the early specialization in sport for mercantile dreams and embrace multilateral development as one of the "paths to develop the Humanity within".

We owe it to our kids!

Bibliography:

Barbreau, E., G. Durand, M. Durand. 1984. Contribution a l'etude de la morale sportive chez l'enfant, Sciences et Techniques des APS

Bompa, T. 2000. Total Training for Young Champion, Human Kinetics, Champaign, IL.

Bompa, T. 1999. Periodization Training for Sports, Human Kinetics, Champaign, IL.

Durand, M. 2006. L'enfant et le Sport, Presse Universitaire de France, Paris

Gallahue, D.L. 1982. Understanding Motor Development in Children, Wiley, New York

Gill, D.L., D.L., J.B. Gross, S. Huddleston, 1983. Participation Motivation in Youth Sport, International Journal of Sport Psychology, 14, 1-4.

Harter, S. 1978. Effectance Motivation reconsidered: Toward a Development Model, Human Development, 21, 34-64

Harter, S. 1982. The Perceived Competence Scale, Child Development, 53, 87-97

Malina, R. 1986. Readiness for Competitive Sport, Sport in Children, Human Kinetics, Champaign, IL

Malina, R. C. Bouchard, O. Bar-Or, 2004. Growth, Maturation and Physical Activity, Human Kinetics, Champaign, IL

Nagorni, M.F. 1978. Facts and Fiction Regarding Junior's Training. Fitzkultural Sport, Moscow

Piaget, J. 1932. Le Jugement Moral chez l'Enfant, Presse Universitaire de France, Paris

SECED, Research International, Paris, 1980. Les Enfants et le Sport