

Developing the Total Player – An Integrated Strategy

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Worldwide the arguments rage on the best strategy to implement that optimises a player's performance. On one hand we have some coaches who believe that all the physical development of the players arises from working solely with ball. At the other extreme we have some fitness practitioners who argue that it is all about the 'physical qualities' of the player and so promote a 'fitness' based approach.

Obviously the answer lies somewhere in the middle. All maximum performance attainment is a compromise. Not a compromise of the laws of training (Specificity, Overload, Reversibility) but a balanced use of the time devoted to all the constituent parts of the performance puzzle. The skill is to be able to integrate the very best parts of the four pillars of performance – Physical, Mental, Technical and Tactical.

The journey, whether for the developing player or for the mature, seasoned professional, starts with a simple question – 'Where are they now?'

We would suggest that the answer to this lies in the integration of three areas of expertise – Sports Medicine, Athletic Development and Coaching (The Performance Triumvirate).

Sports Medicine can bring to the table a picture of the muscular-skeletal status of the player by the application of an appropriate muscular-skeletal screening. Athletic Development specialists can offer a Physical Competence screening to ascertain the quality of certain fundamental movements and postures. They can also assemble a picture of the player's current physical performance status by conducting such tests as 5/10/20m Speed, Repeat-Sprint ability, Multi-Stage Fitness Test, Agility Test, etc. Coaching can offer an insight into the technical and tactical strengths and weaknesses of the player. By combining all this information it is possible to find relationships between them that serve as the foundation for training systems and delivery.

The very nature of a sport such as football predisposes players to adapt solely to the narrow sports specific movement demands of the sport. If the only exposure a player receives in their performance lifetime is to these football specific actions and postures then certain limitations may prevail. It is not uncommon for this narrow adaptation to create limitations and movement restrictions over time. It is not uncommon for a physical limitation to create a technical weakness. Poor endurance may be caused by inefficient movement mechanics. A lack of reactive ability can have as its source a tactical or decision-making limitation. We must therefore assume that no one quality stands alone and no one quality can be allowed to dominate training processes. The training answer to this potential problem is to ensure that physical training always cycles between general and specific work to ensure all-round development in movement efficiency.

In addition to these basic principles we must never forget that each individual player will require their own unique pathway to repeatable excellence. No two players are the same physically, mentally, technically or tactically and so the fundamental principles for all coaches to have in their tool-box are adaptability and flexibility. This is particularly important in the developmental stages of a player's journey. The 'before, during and after' puberty periods present an array of 'change' unparalleled in a young person's life. The difference in the rate of growth and development seen in a group of 11-15 year old players (male and female) is so profound that there can often be a 2-4 year biological difference between players of the same chronological age. Adaptability and flexibility become THE major tools for the coach during this time.

Where are they now? -Example Screening Results

Sports Medicine Department

A **Muscular-Skeletal Screening** may provide the following type of information:

Physical:

Remedial Actions (Sports Medicine incl. Medical/Physiotherapy/Massage/Consultants):

1. *Small leg difference and scoliosis with mild back asymmetry – need to maintain single leg and weight transference control*
2. *Tibial varum and planus feet with excessive knee locking and lower limb externally rotated – needs dynamic foot control, gait re-education and shoe prescription*
3. *Poor control/stability – squat, single leg R>L, bridge, abdominals/pelvis and upper back extension*
4. *Poor flexibility – hamstrings (very poor), neural tissue (very poor), quadriceps L>R, internal hip rotation L>R and upper extension (very poor)*
5. *Reduced L&R ankle range (DFix) – needs further examination (MRI - XRay). This is impacting negatively on gait and triple flexion / ext / Landing*
6. *Right side thickening and tenderness in posteromedial shin – plus compensatory pronation thus need to monitor running and shoe prescription for running/weight bearing activity*

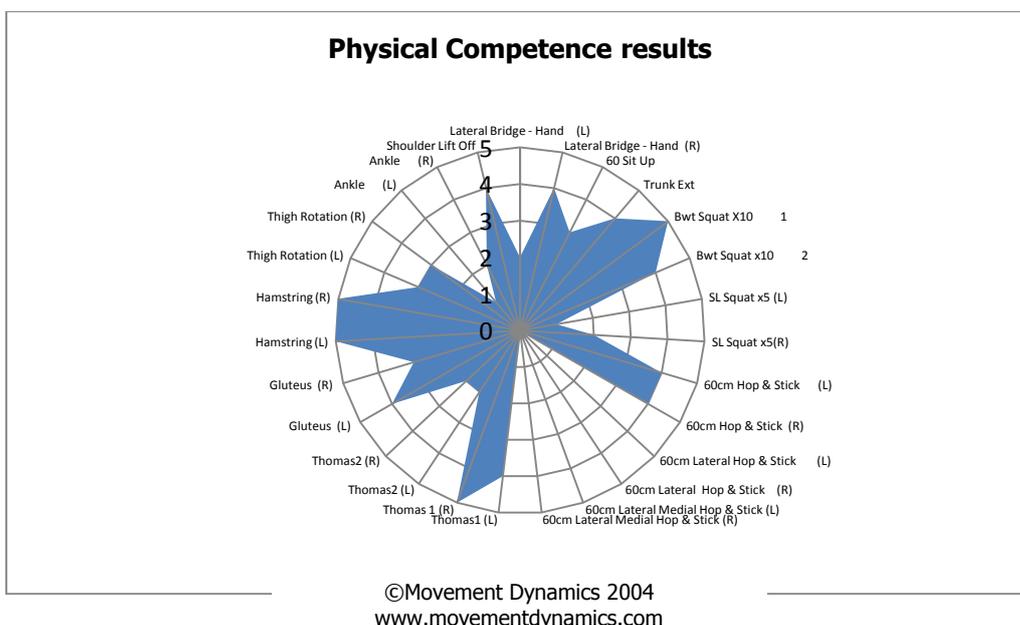
Performance Enhancement & Injury Prevention (Athletic Development + Sports Medicine):

1. *Poor trunk integrity – only with 60 degrees sit up? hip flexors/abdominals*
2. *Below average hopping and landing (1)*

This type of report is usually followed by some guidance on the remedial actions to be taken. This may be in the form of direct contact with a Physiotherapist or series of training recommendations for the Coach to follow.

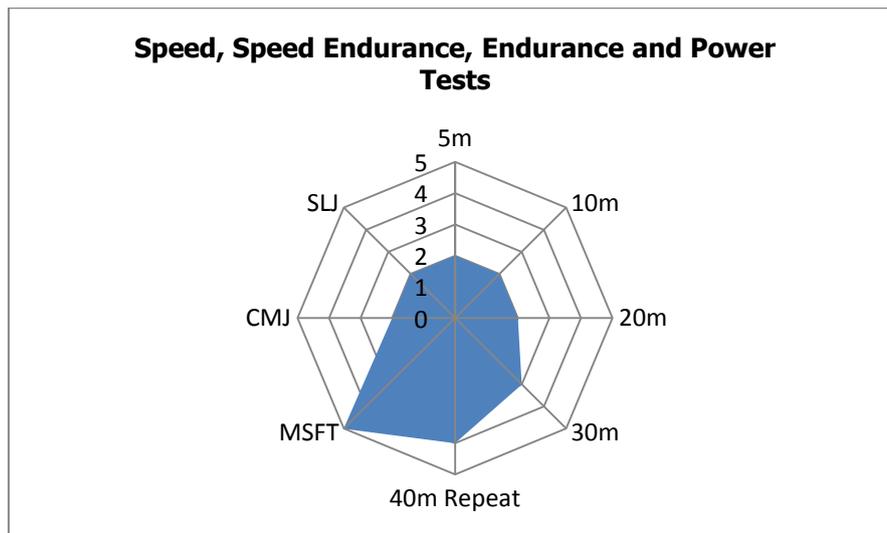
Athletic Development / S&C / Fitness

A **Physical Competence Screening** (2, 3) may present the following picture of the player:



The above illustration has been created using the Movement Dynamics (2, 3) Physical Competence assessment process. Worldwide there are many assessment systems available to the coach in respect of movement efficiency screening and this one was chosen for the flexibility and specificity it offers. It contains a 1-5 scoring system ranging from 'Desirable' (a score expected as being normal for the general population) through to 'Poor' that describes a critical limitation. Many of these scores will be a reflection of the muscular-skeletal results and offer an integrated approach from two of the performance triumvirate. The player in the illustration shows limitations across a wide range of movements.

A **Performance Test Battery** will give information on the 'end-stage' ability of the player:



The tests illustrated in the graph are just some of the tools available to the coach. More extensive investigations may see the use of more sophisticated assessments including Lactate, Hydration, Muscle Enzyme, Phosphate Decrement, etc. Here we have a player who can 'keep going' during a game but has little quality to bring due to limitations in speed and power.

Technical Coaching Staff

Add to this a **Technical and Tactical** assessment and you have a clear picture of the holistic nature of all proceeding interventions.

A deeper look at all these results show many relationships that can help us focus on – **'What to do next?'** In the preceding examples we have Ankle Range limitations highlighted by the Physiotherapist. This is confirmed by the Physical Competence (score 1 and 2) Test and the Performance Tests where a lack of speed and agility are apparent. The ability to Squat (Double and Single Leg) may well be being affected by the Ankle problem along with many other facets of the other movement limitations. Limitations in flexibility / mobility around the hips (Thomas Tests, Thigh Rotation Tests, Gluteus Range, Hamstring Range) will also negatively affect force reduction / production / stabilisation capabilities. Much information can be mined from an in-depth look at the various screens.

Whether this is a developing player or a senior professional the answer is clear – this player requires a unique training environment. One size does not fit all.

There can be no doubt that this will impact on the human resources available. In the development world there is little chance to apply all this knowledge if there is one coach to 25 players. However, with foresight, the enlightened coach may well recognise that this is far more than just playing the game and that other processes must be considered.

At the professional level the stakes are so high that it is impossible to ignore this multi-disciplined approach yet some Head Coaches still implement a 'my way or the highway' approach. They don't get it because usually they simply don't know.

Practical Solutions

None of this should be viewed as revolutionary. Revolution never works and all practitioners involved in the player's development pathway should consider a more evolutionary approach. For example appropriate 'change' can take place in a simple form – the Warm Up.

Often the most wasted of opportunities, the warm up offers enough time to explore movement rehearsal and neural preparedness for what is to come during the main part of the training session. In addition, if done correctly, this exposure to 'work' sets up a process of adaptation over the long term of its existence – it becomes a training unit in itself. This helps the 'ballwork-only' coach feel less uncomfortable about the changes to their session. Of course the players will feel different after a new form of warm-up. They may have small reactions of fatigue and muscle soreness in the first instance, particularly the next day, but this is a temporary issue and passes very quickly. When starting such a concept it is best to 'site' the new sessions at a benign part of the training week and to explain the potential outcomes to the coach. I have seen many reluctant coaches use any fatigue or any small muscle soreness as a reason to cancel these new ideas. In fact there are many of these dinosaurs who spend all their time looking for the excuse. It is paramount that the practitioners delivering these 'better practice' ideas are cognisant of the political world they live in.

The days of jogging round the field a few times and then doing a couple of stretches is a 'dark-age' mentality. The 15-25 minutes often devoted to the warm up can be viewed as a workout in itself. It should be planned and progressive and parts of it can be individualised to cater for the unique needs of the individual player. In the senior professional ranks it is likely that 5 or 6 warm-ups will be conducted in a training week. This offers 100 – 120min per week to expose the players to appropriate Athletic Development activities. Expand this concept over a season and you have nearly 80 hours of opportunity to make a difference. Remember it is not how much time you have at your disposal – it's what you do with the time that is the key. When one considers that, with appropriate exercise selection, you can experience 150-300 movements in a 20min period there is no excuse to waste this valuable time.

Other training 'modules' can be created to support what goes on in the warm-up. They are designed to be no more than 20-25min in duration and can be classified relative to the rhythms of the training week e.g. Flexibility Module; Landing Module; Bracing Module; Upper Body Module; Lower Body Module; and combinations of all of these; etc.

This article is not designed to present all the details of what these Athletic Development sessions should look like in terms of exercise selection – there are far too many illustrations. What are important are the simple rules of training progression: Static to Dynamic; Slow to Fast; Simple to Complex; Low amplitude to High amplitude; Unloaded to Loaded. Use these progressions to create a forward moving process for the players.

Summary

Simply placing all players in the same training program of technical / tactical / metabolic fitness training while ignoring the need for athletic development / S+C work denies the player a vital component of their overall development.

Expecting players with severe limitations in movement quality / efficiency to 'survive' the applied training over time is akin to sticking your head in the sand.

In the case of professional / elite players, many have arrived at that level with adequate or even excellent 'Performance Test' results (10m, 20m, Vertical Jump, Repeat-Sprint ability, etc.) yet may display severe limitations in flexibility, mobility, single-leg efficiency, landing mechanics etc. This type

of player may even experience very few injuries BUT with constant micro-trauma taking place over time, due to severe functional movement limitations, chronic pain syndromes as well as degenerative conditions are likely to develop.

Our primary goal as Athletic Development / S+C / Fitness coaches / Sport Coaches is to develop programs that are both performance enhancing and injury reducing.

This means that the Technical / Tactical / Physical / Psychological components are all are integrated with the overall goal being the protection of our prized asset – the PLAYER!

For this very reason we would be providing a disservice to our players by simply putting all in the same 'one-size-fits-all' program.

References

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