

**The Ultimate Guide to
Speed Development
for**

GAA PLAYERS

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Thank You

Thank you for signing up to get your hands on my new eBook. I've been kicking a ball since I could take my first steps & just like you, I love nothing more than getting out on the pitch & performing to the best of my ability for my local club, St. Lomans, Mullingar in Co. Westmeath. Over the last 10 years, I have helped thousands of athletes improve their strength, fitness, performance and rehabilitation across a wide range of sports including working with some of the best GAA players in the country such as Conor McManus & James O'Donoghue.

This eBook is a combination of thousands of hours that I've spent researching & testing various approaches to speed development & performance on myself & hundreds of my clients over the last 10 years. I am constantly researching, adapting & challenging the status quo & traditional methods to develop a better way for my clients to achieve results.

My aim within this ebook is to help any GAA players and coaches around the country and beyond who want to develop a better understanding of how to enhance your speed and performance. How can we be as functionally fit as possible to enhance our on-field performances to give our clubs and counties the best chance of winning?

“Should I run 5kms every day or should I sprint?”

“How do I get faster?”

“What's the best running to do if you play midfield?”

These are some of the most common questions I get asked every day on Instagram but to get the results you want, you need to develop a greater understanding than I could possibly provide over a couple of text messages. In this eBook, I hope to give you a greater understanding of speed development, particular training methods and routines that you can implement to enhance your speed and how your particular position may impact on the type of training you should focus on.

This eBook is the perfect starting point that will give GAA players & coaches enough information to make significant progress on their own but only scratches the surface in terms of the depth of knowledge, training approaches and the specific help that I share with personal clients and practice myself.

***Let's dive into It,
Shane Flynn***

What is Maximum Speed Training?

Maximum speed is a vital component for many sports and consists of three phases: **start, acceleration and maximum velocity** Young et al., (1995). Maximum speed training involves working at 90-100% effort with maximum recovery. Our sole focus in these sessions is to ***only perform reps that are our best effort.***

If we are highly fatigued, we will not recruit the necessary muscle fibres and we will not have an adaptation either. The principle of adaptation refers to the process of adjusting to a physical, psychological or environmental stressor Selye (1957).

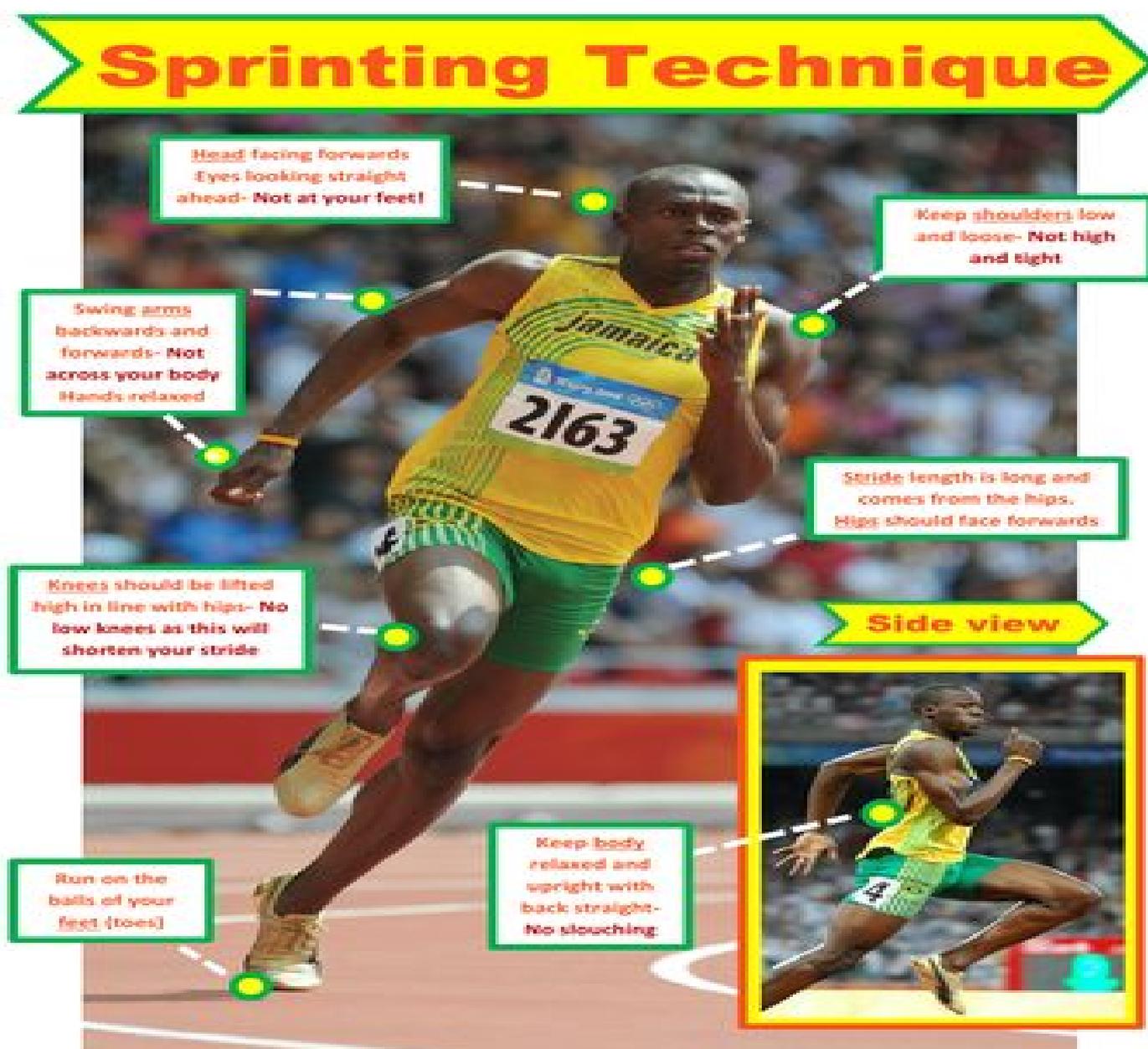
If you want to maximize your results and progression, **we need to constantly vary the exercise and training routine** because otherwise, our bodies become accustomed to a particular exercise or training program through repeated exposure and you will not see the results you deserve.



What is the Best Type of Training to Enhance Your Max Speed?

Despite what many GAA coaches believe, **running is actually the best type of training** that you can do to develop your maximum speed. But how do we trick the body in order to ensure an enhanced and progressive change over time?

First of all, **maintaining good running mechanics is essential** i.e forward lean during acceleration, stay low and concentrate on driving force back through the ground with an aggressive arm swing.



Secondly, **resisted sprint training** can be incorporated into your routine to really help you enhance your max speed.

“Resisted sprint training will eventually lead to increases in stride length during normal unresisted running, by increasing power and strength output” Harrison (2009).

However, when you are training the secret is **not to alter your running style and mechanics too much with excessive and unnecessary resistance.**

For example, if you put 50kg onto a sled and try to sprint, it obviously won't happen easily and doesn't replicate your regular running mechanics during a GAA match. You will have much slower stride rates and will struggle to keep the correct form.

This type of training would benefit a rugby player replicating “driving”, since a player hangs out of them when they are “driving” but will have minimal benefits for a GAA player trying to develop their max speed.



Recommended Resisted Speed Training Approaches

There are a number of simple approaches we can use to give us the resistance necessary to enhance our max speed training routines.

Parachutes are an excellent way to provide a stimulus without affecting your running mechanics. If anything, it is giving you an opportunity to focus on essentials such as massive knee drive, arm swing and rate of force development.

Sleds are excellent but as discussed previously, we don't want to impact our natural running mechanics by using large weights. For max speed development, we should use about 5kg or 10kg at the most.

Over speed training is an advanced method but it is very effective. Over speed training can be done with a bungee cord where you run and the cord shortens. Perhaps a friend holding it or running ahead of you and you wait an extra second or two and then accelerate with the suction created. Be careful though, as it will propel you faster than you could ever accelerate.



How to Enhance Your Acceleration

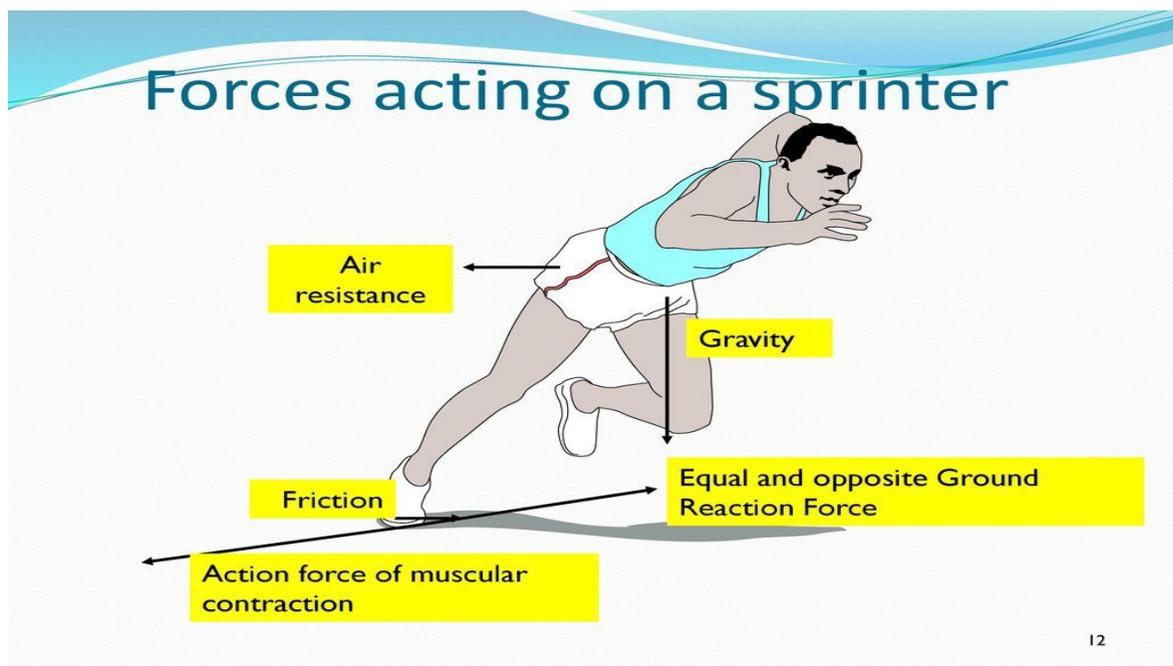
“Acceleration is the ability to increase your movement velocity in a minimum amount of time” Little (2003).

“Acceleration is extremely important for field sports, as maximum velocity is rarely reached, so the initial take-off is crucial to gaining an advantage” Young et al., (1995).

Acceleration can be anything from 0-40m for a high-level athlete, with highly trained sprinters not reaching max speed until 80m Michiyoshi et al., (1992). At an amateur level, it can be only as far as 0-20m due to poor mechanics and rising up too early.

Acceleration is all about creating as much force as possible with each step. When accelerating, technique is not as important as power production of the lower limbs in particular Cronin (2006).

When we are accelerating you have a longer ground contact time when compared to when you are at 40-100m. This is because in this phase we need to put as much force as possible into the ground to get up to speed.



Going back to our earlier example of a 50kg sled being too heavy for max speed training, we can find a happy medium for acceleration.

If we were to use a 15kg sled, we would be forced to really drive extra hard with every stride which is perfect for creating an adaptation for our first 0-20m speed.

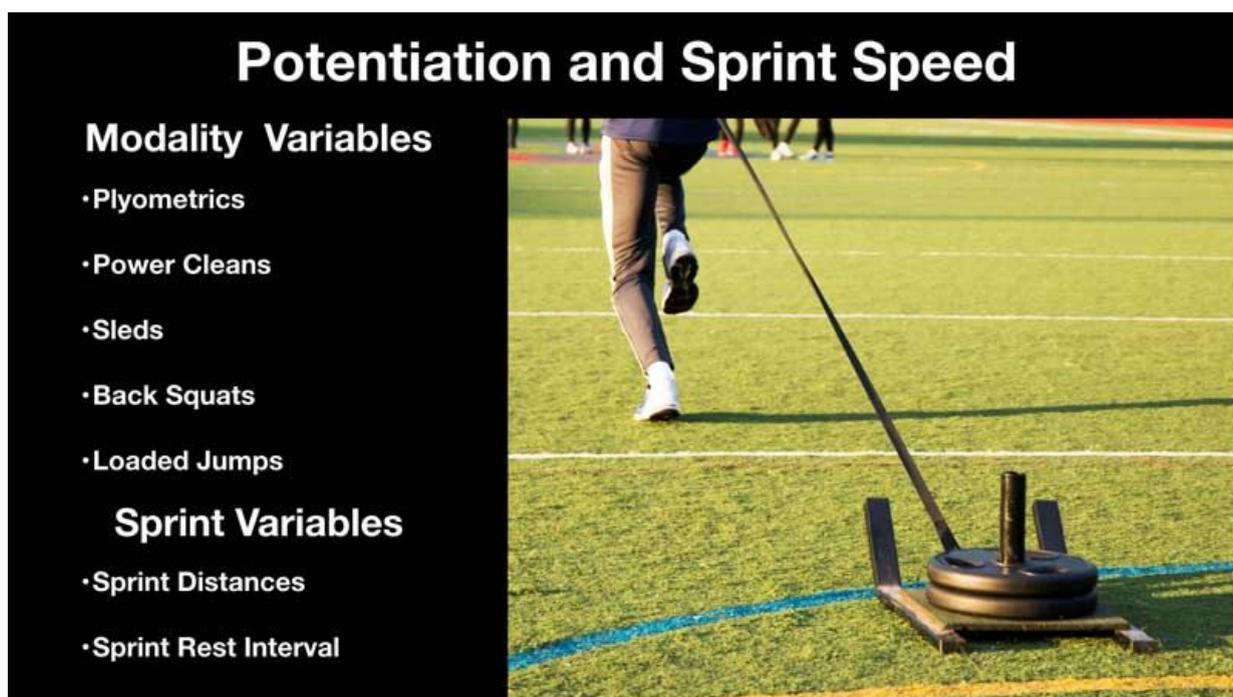
Here is a sample training routine to enhance your acceleration:

1. **20m sled drag at 100% @ 15kg**
2. **Rest for 60 seconds**
3. **Free sprint 20m with no sled**

In an example like this, we create potentiation from the loaded sprint. We need to allow fatigue to drop but not too long as potentiation needs to remain high.

Seagrave (1996) believed that the sled load should be determined by the extent to which performance is affected. If you are unable to maintain proper running technique then the sled is too heavy.

Here are a few simple eg of stimulus used to enhance your acceleration:



Can You Improve Your Speed in the Gym?

In my experience, if you line up ten 12-year-olds and you get them to test max chin-up strength, the child who can do the most will almost always be the fastest child in the group. We're presuming that no child has a few years of training under them but this proves that at a fundamental level, sprinting is simply strength to bodyweight ratio.

You've learned already that to sprint fast you must accelerate efficiently, and for optimal acceleration, there needs to be a high level of power output. **The more functional strength you have, the faster and more explosive you can propel forward.**

As a result, **lower limb strength training has been shown to be very beneficial for your sprinting capabilities.** You cannot develop your power production capabilities until you have an adequate base of strength. Does your current training programme involve sufficient focus on lower limb strength training?

Helgerud (2011) agreed with this statement showing positive results from strength training with elite soccer players. Plyometrics is another way of improving sprint performance by inducing positive adaptations of explosive power Ramirez-Campillo et al., (2013).



However, changing your training routine to include more lower limb strength work is not sufficient on its own. Maximum speed is undertaken at efforts of 90% and above. This is fueled by anaerobic ATP-PC which takes anywhere from 3-5 minutes to fully recover between reps and 6-8 minutes between sets Bompa (2018). So, **GAA players who want to develop their speed in the gym need to take much longer rest periods than usual.**

Objective	Distance in Metres	Percentage of Best Effort (%)	Recovery Time	
			Reps	Sets
Speed - ATP-PC	20 - 80	90 - 95	3 - 5 Minutes	6 - 8 Minutes

How many GAA players can say that they take rest periods that long when they are trying to develop their speed?

Without the necessary rest periods, your gym workouts are not going to deliver the results that your hard work deserves because you are not reaching the necessary level of potential effort since your fuel source has not been fully restored.

Maughan (2010) stated that the glycolytic system is the second anaerobic energy system and is called upon for bouts of activity that last between 20 seconds and 2 minutes. The primary source of this fuel in this case comes from the breakdown of carbohydrates stores, with the majority of ATP supplied from fast glycolysis up until roughly two minutes. Fast glycolysis causes the creation of lactic acid extremely quickly resulting in the body being unable to buffer or 'flush out' this lactate. As you may know, a buildup of lactate causes fatigue and eventually the cessation of activity Bompa (2018). Adequate rest and building up intensity over time are the most effective ways of ensuring lactate build up does not hamper performance.

Objective	Distance in Metres	Percentage of Best Effort (%)	Recovery Time	
			Reps	Sets
Anaerobic Capacity - Glycolytic	> 80	80 - 90	30 Seconds - 5 Minutes	2 - 3 Minutes

How Should Your Position in Your GAA Team Affect Your Training?

In this section, I will give you a baseline level of knowledge that you can adapt depending on your position.

Based on the generally similar demands of the game, I am going to group midfielders, half-forwards and half-backs together. I am also going to group full-forwards and full-backs together too.

It is fair to say that all GAA players need to be able to get up and down the pitch but there is a **difference in the typical distances covered and the speeds at which they are covered depending on your position in the team.**

You also need to know what type of athlete you are. Do you find endurance or slower pace running easier than the high speed or lactate style? There are a few very common traits across the board such as a link between naturally less explosive athletes and those who struggle with plyometric actions.

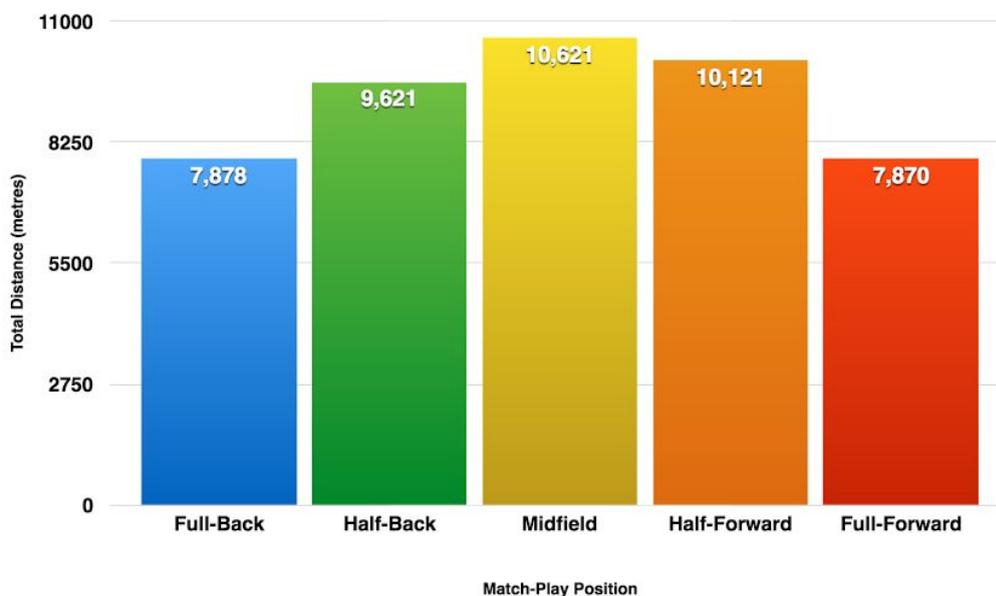
In an ideal scenario, these athletes should be playing further out the field so they can get away with not having explosive sprint speed that an inside player might have naturally. The exception is a big target man inside. However, the standard is increasing all the time so we need to get a nice mix.

In a county-standard match, a midfielder, half-back or forward will cover between 9-11km. The players in the full-forward or full-back line will typically cover between 7-9km.

Of course, there are cases where a full forward might only cover 3/4km and it could be a man of the match performance or conversely, they may not have touched the ball.

When we dissect these numbers we start to see a difference in speed though.

Running Performance Across Positions in Elite Gaelic Football Match-Play



I have shared some real data from my own training sessions to show an example of the link between the type of training GAA players should use to develop the speed necessary for the in-game demands of their positions below. In the weeks leading up to this session, I had been focusing on 100m & 200m runs with a specific goal behind it. Rest periods had progressively declined from 90 seconds in between reps three months previous to 45 seconds in between reps in this case.

1. 10 x 200m in 36-40 seconds with 60-75 seconds recovery
2. 10 x 100m in 17-19 seconds with 45 seconds recovery
3. 14m line to the far 14m line at 85% soloing with a ball and jogging back with 60 seconds rest x 30 minutes long
4. Pyramid sessions:
 - 100m in 15 seconds with 45 seconds rest
 - 200m in 35 seconds 60 seconds rest
 - 400m in 80 seconds 90 seconds rest
 - 600m in 2.17 minutes with 3 minutes rest
 - 800m in 3 minutes with 3 minutes rest
 - 1km in 3.37 minutes session over

Pyramid sessions can be done over any length and can build up or come down

Finally, this following exercise is a personal one that I developed, that I've never seen anywhere as such, and it is torture. I set my watch and in 30 minutes try to replicate actions from the toughest match possible. It's like a fartlek run just without the structure. Aim to clock up 5km in the 30 minutes of sprinting, jogging and a small bit of walking or standing still if needed.

My plan with this routine was to patiently build the pace up and gradually reduce the recovery period. The purpose was to ensure that I had built enough capacity in my legs to complete those big efforts but also recover before the ball might be brought back into play.

And as a GAA player, regardless of your position, that's the ideal type of conditioning that you need.

Personally, I would be an explosive player but it has been a long time since I have focused my own training specifically for football, so I was starting from scratch, rebuilding it all up again and conditioning my body to be able to perform to the highest levels.

It's very important that you are patient with your progression.

As much as you might feel you want to blast out a rep or two, it's more important to be getting through sessions and allowing a day or so to see if you have any niggles.

Then, when you are ready, increase your output in the following session.

I play full back so technically, the forward dictates how much ground you cover. We all know that if a forward is fresh and is allowed to recover then it becomes much easier for them to play well or beat you to the ball.

I wanted to try to get involved in attacks in order to increase the amount of work he would have to do and make sure he wouldn't be as fresh the next time the ball came towards us and so on.

Do Your Training Sessions Align With Match Conditions?

Oftentimes, the reason GAA players struggle to get fit is because they don't know their zones or efforts. You do not need a Garmin watch to know if you are working hard or honestly. The watches are an unbelievable tool for counting and laying out sessions but ideally you are running the reps with genuine effort and trying to stay consistent.

In this example, shown below, I completed my toughest training session in terms of volume. It involved 40x100m sprints all within 18 seconds with only 45 seconds recovery.



What should you be trying to develop in a session like this and what do you have to be careful of?

- You cannot go out at 90-100% because you will not recover in time for the 2nd rep
- You are trying to have every run consistent
- The aim is to increase the lactate threshold. This means your max effort that your body is able to remove more of the lactic acid before it builds up. If we fill up with lactate, the session will pretty much be ruined and the quality will be gone.
- We can make this more difficult by making the run longer, running the distance faster or cutting the recovery down

The screenshot of the 40 x 100m session is shown below.



I am a big believer in visualisation and in all of these runs, I was consciously reinforcing that I was able to go from box to box or 45 to endline or other match scenarios.

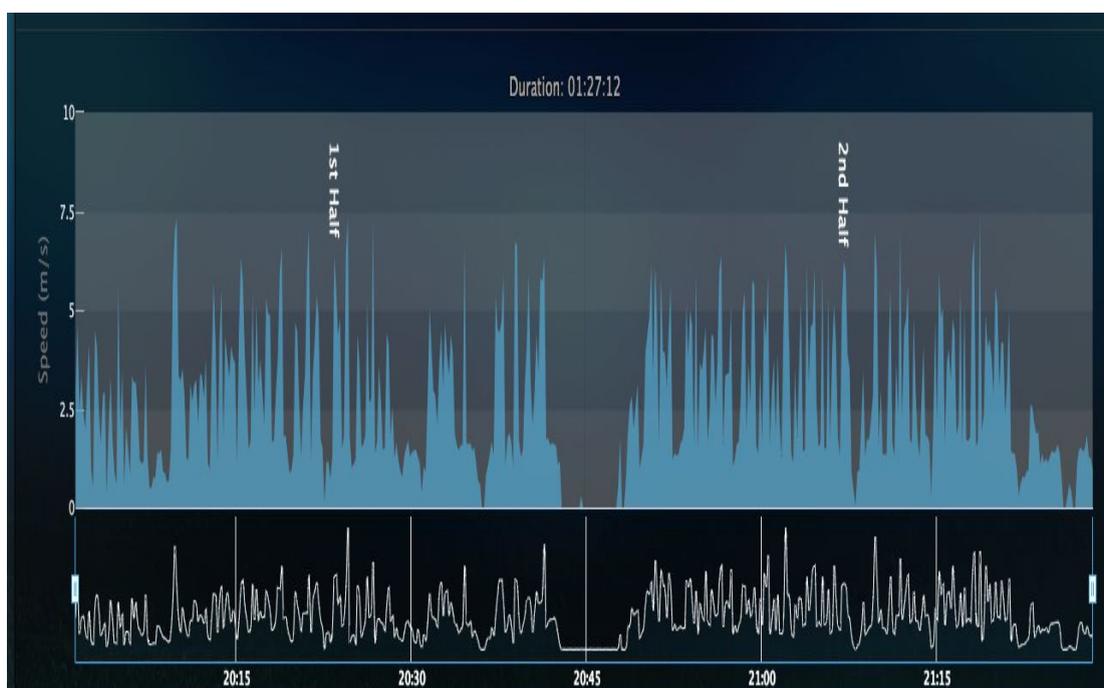
You aren't running aimlessly on a treadmill or cycling on a bike. **With this approach, you can see and feel different match scenarios playing out in your head.** When the situation presents itself in a match you remember that you completed the same run in 15 or 16 seconds 45 minutes into your training sessions.

This may be particularly effective for anyone who needs to boost their mental belief and psychological commitment.

By taking this approach, you have made training significantly tougher than any match situation that you will ever be confronted with. On the match day, you will comfortably deal with and surpass the demands placed on you.

By training in this manner, it can also help your mental preparation before the game. Every GAA player knows the anxiety and fear that can take over your mindset when you know that you aren't sufficiently prepared or ready to perform to your best.

The heart rate action from the match following this training session is shown below. Naturally enough, it will be really unpredictable and much more stop-start than the training session. We have to account for a lot of hits and tackling which is pretty much anaerobic conditioning.



Here are the stats for the game:

1. Distance covered was 8.66km
2. Top speed of 27.9kmh (7.76m/s)
3. Power plays 61



On its own, the distance covered itself, doesn't reveal a whole lot. A player could cover 10km but be sauntering through the game and rarely involved with little, if any, impact on the outcome.

Whereas, the ability to make one blistering run through at speed in the final few minutes could finish a game off or turn it around for your team.

By adopting this approach to speed development training, not only will you be quicker to the ball but you will also have **much greater speed endurance and repeatability power to make intense sprints regardless of the time in the game**. This can be a game changer for you and your team.

We have all seen many cases in GAA games where a player cuts through with a full-speed run that changes the game but I'm sure you've also either seen or experienced times when the player has the opportunity to make a run just like that but just isn't able to.

The opportunity is squandered and the game passes our team by with inevitable and eternal "what ifs?".

"What if you were faster and able to capitalize on the chance?"

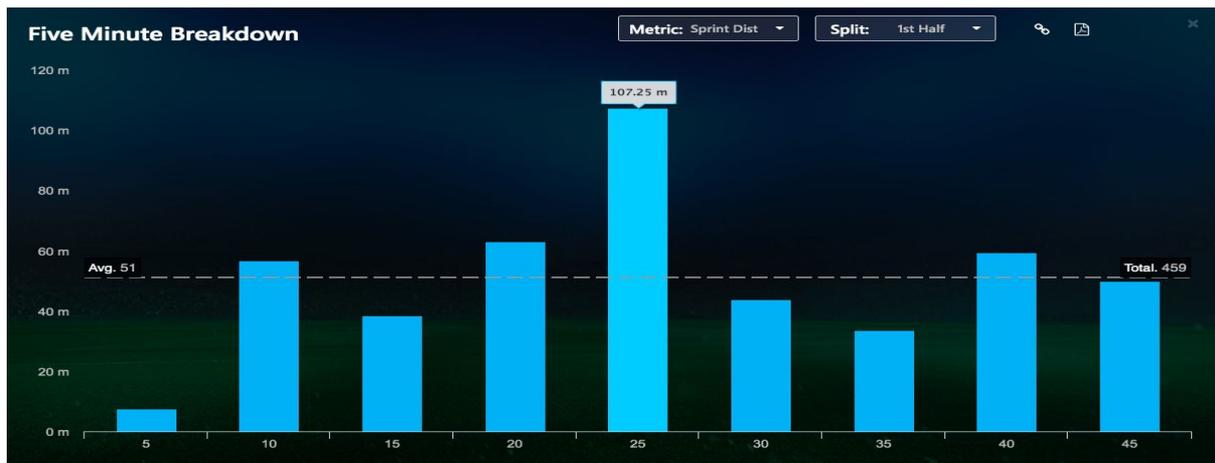
"What if it was a different player with the last chance?"

"What if we subbed them for somebody with more speed?"

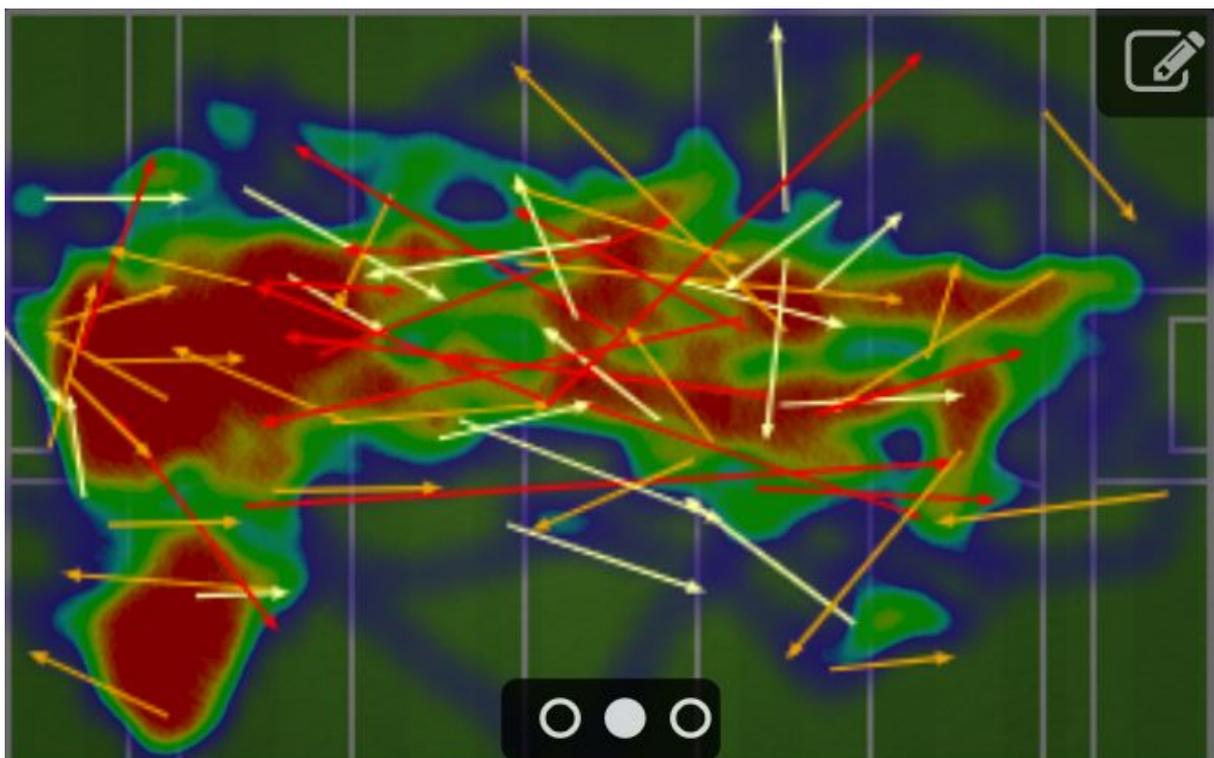
These are the last questions that you want to hear your teammates, management and supporters talk about after a disappointing end to a match.

Rather than hoping that the opportunity arises at the perfect moment in the game for you, by implementing this approach to your speed development training, you will be literally just waiting for your chance to breakthrough at any point in the game. With this approach to your speed development training you will develop much greater speed endurance and repeatability power as opposed to typical GAA training programmes which often focus on the development of the ability to run consistently for longer but at a slower pace.

I have attached two screenshots below to show how this approach to speed development training will provide much better preparation for actual in-game scenarios that arise. The image shown below is a five-minute breakdown of my sprint distances. You can clearly see the longest sprint of 107.25m.



In the following image, you can see this particular sprint as the largest red arrow, starting on the left just outside the 14m and going all the way to the very same spot on the far side. It was all in the same timeframe of 15 or 16 seconds from start to finish and resulted in a pass to a forward who knocked it over the bar.



However, you can also see a clear example of the speed endurance and repeatability power that I have developed from my training programme.

The arrows going from right to left through the centre took place during the second half and were similar style runs to the ones I had completed in training at 85-90% effort but were actually of less distance than the typical length in the training session.

Nonetheless, at this late stage in the game, it felt fantastic to be comfortably completing these surges as a result of the repeatability power and speed endurance that I had developed through my approach to speed development training.

Why Full Forward and Full Back Line GAA Players Need a Different Focus and Approach to Speed Training

The demands typically placed on the GAA players of the full forward and full back lines consist of much shorter, sharper bursts than their counterparts out the field.

The training methods outlined in the sections above are undoubtedly going to make any GAA player much more explosive and give them the ability to go on darting runs regardless of their position.

However, a different aspect known as **anaerobic fitness also requires a specific focus in GAA players training routines, and particularly for those players in the full back and full forward lines.**

In this case, it's all about timing. Initially, you need to build a solid foundation and as you progress, you should gradually ramp up the effort but conversely, also reduce the volume.

By taking this approach, you will develop the necessary levels and correct type of anaerobic fitness to fulfil these shorter, sharper demands during matches in the Championship season.

Unfortunately, very few GAA players, clubs and even county panels have the correct focus or approach to their training for specific demands placed on different positions.

If your current training routines include intense sprinting sessions at the start of the year or lead to players getting sick during training sessions because of the highly anaerobic nature of these sessions, they will not stand to you four or five months down the line when you're wondering how you can't beat your marker to the ball in the Championship.

Pitch training sessions should rather include suicide runs of the most well known 150m shuttle test but I tweak it just a little.

This is normally 25 metres distance in 5 seconds.

- Endline to 5m and back
- Endline to 10m and back
- Endline to 15m and back
- Endline to 20m and back
- Endline to 25m and back

There are a couple of variations that you can use with this routine:

1. Run it until you complete it and rest for 30 seconds. Repeat six times.
2. Start from the longest distance and work back so you can really accelerate fast when you are fresh. This builds speed rather than just lactate in the legs.

Finally, a simple routine particularly for inside players is shown below.

The focus here is fitness and not maximum speed so remember at the start we are looking to be just short of sprinting.

- Endline to 21m and back
 - Rest for 10 seconds
- Endline to 45m and back
 - Rest for 20 secONDS
- Endline to 21m x 2
 - Rest for 20 seconds
- Endline to 45m and back
 - Rest for 20 seconds
- Endline to 21m x 3

Finish and allow full recovery for 2 - 3 minutes and repeat five times.

What Type of Training Routines Can the Full Back and Full Forward Lines Use in the Gym to Train for these Shorter, Sharper Sprints?

No matter who you are or how fit you are, if you were to push yourself absolutely all out, your peak power will start to deteriorate after about 5-10 seconds.

Bouts of all out maximum effort whether it is sprint sessions or weightlifting are fueled by the ATP-PC system. This energy system is very short lived and requires multiple reactions within the body to create this fuel Bompa (2018).

Although it is a restricted source of energy, it is reserved only for the most forceful of muscular contractions. It also takes less than 10 seconds to deplete but can be recovered by up to 70% within 30 seconds and fully restored within 3 - 8 minutes of rest Hultman et al., (1967).

As you approach the 10 seconds mark of maximum effort, the glycolysis system we talked about earlier starts to come into play.

Objective	Time	Percentage of Best Effort (%)	Recovery Time	
			Reps	Sets
Anaerobic Capacity - ATP-PC	2 - 10 Seconds	95 - 100	3 - 5 Minutes	6 - 8 Minutes

To develop this type of speed in the gym, we need to work at maximum effort in the range of 10-20 seconds. You can work for 10 seconds and rest for 20 seconds. This will allow you to train with a little more power than if you were to do things the opposite way around i.e. 20 seconds on and 10 seconds off because the fatigue would be way too high in this routine. You should complete intervals for 3-4 min in total.

Here is a list of some different types of exercises that we can incorporate into this style of training programme:

1. Watt Bike or Assault Bike
2. Rowing machine
3. Repeated box jumps
4. Med ball slams
5. Battling ropes
6. Sprints
7. Prowler push
8. Boxing bag

I chose these exercises as you can actually generate large amounts of power at high velocity while performing them. Exercises that are often used by GAA coaches such as burpees etc. are too slow to achieve the outcome that you want in this particular case.

Do You Want Even Better Support to Improve Your Overall Performance for Your GAA Team?

One thing is definitely for sure. By downloading this eBook and making it this far you definitely want to improve your speed and performance for your GAA team.

You are probably visualizing the impact your new found speed will impact on your own game, on those one-to-one battles during a match and more importantly, the fortunes of your own GAA team in this year's Championship.

Unfortunately, 90% of you will either never implement this training consistently enough or you will be unable to spot the subtle changes needed to adapt your training programme to reach the personal goals that you want to achieve.

Furthermore, speed development is only one single aspect that you can develop to contribute to a greater overall performance.

I can use over 10 years of experience to help you with every single aspect of your physical fitness, performance and rehabilitation as part of my [Online Coaching Academy](#).

As part of my Online Coaching Academy, you will get access to tonnes of articles and video tutorials on nutrition, training, functional and rotational movements, performance, rehabilitation, speed, physique, power and access to a wide range of different workout programmes to suit your goals.

We will also have weekly, 1-to-1 online check-ins to assess how your training is progressing, assess what improvements we can make and overcome any problems, difficulties or challenges that we may be having with our training, performances in matches or general wellbeing. [Click Here to sign-up for my Online Coaching Academy now.](#)

If you have any questions feel free to email me at shane@nextgenspeed.ie

Key Lessons from The Ultimate Guide to Speed Development for GAA Players

- ★ Maximum speed is a vital component for many sports and consists of three phases: start, acceleration and maximum velocity
- ★ Maximum speed training involves working at 90-100% effort with maximum recovery
- ★ If you want to maximize your results and progression, you need to constantly vary the exercise and training routine
- ★ If you want to maximize your results and progression, you need to constantly vary the exercise and training routine
- ★ Maintaining good running mechanics is essential
- ★ Appropriate resisted sprint training can be incorporated into your routine to really help you enhance your max speed
- ★ Parachutes, sleds and over-speed training are tools to incorporate appropriate resisted sprint training into your routines
- ★ It is vital not to alter your running style and mechanics too much with excessive and unnecessary resistance
- ★ Acceleration is extremely important for field sports, as maximum velocity is rarely reached, so the initial take-off is crucial to gaining an advantage
- ★ Acceleration is all about creating as much force as possible with each step.
- ★ The more functional strength you have, the faster and more explosive you can propel forward
- ★ Lower limb strength training is very beneficial for your sprinting capabilities
- ★ GAA players who want to develop their speed in the gym need to take much longer rest periods than they typically do
- ★ Adequate rest and building up intensity over time are the most effective ways of ensuring lactate build up does not hamper your performance
- ★ Pitch sprinting sessions can not only help your physical speed development but also your psychological preparation for in-game scenarios
- ★ There is a difference in the typical distances covered and the speeds at which they are covered depending on your position in the team

- ★ Anaerobic fitness also requires a specific focus in GAA players training routines, and particularly for those players in the full back and full forward lines
- ★ Full forward and full back line GAA players need a different focus and approach to speed training
- ★ Much greater speed endurance and repeatability power to make intense sprints regardless of the time in the game
- ★ If your current training routines include intense sprinting sessions at the start of the year or lead to players getting sick during training sessions because of the highly anaerobic nature of these sessions, I can promise you that, regardless of what your trainer says to you, they will not stand to you four or five months down the line when you're wondering how you can't beat your man to the ball in the Championship.

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