Ulster GAA: Sport Science

An analysis of kick out patterns in the Ulster Senior Football Championship 2015

Introduction

Kick out strategy of inter-county teams has come under scrutiny in recent seasons. Traditional kick out strategy in Gaelic football has been challenged as part of an ongoing tactical evolution. Success of various strategies are largely unproven, with effectiveness confirmed largely by subjective means.

However, kick out effectiveness is difficult to define. Some view gaining possession as sufficient to measure success, while others question this concept, arguing that area of the pitch in which possession is gained is critical. There is also a growing cohort beginning to question the importance of winning kick out possession at all.

The purpose of this article is to analyse kick outs taken in the 2015 Ulster Senior Football Championship (USFC) and attempt to establish relationships between kick out length, kick out outcome and possession outcome. It is hoped this analysis will provide an initial objective measure on potential success of various kick out strategies in Gaelic football.

Background: What was analysed?

A total of 335 kick outs were taken in the USFC, with 331 kick outs analysed retrospectively using standard Ulster GAA footage. Footage of the remaining 4 kicks was incomplete and they were therefore not included in this analysis. The 331 kick outs analysed were spread across 8 games; 1 preliminary round match, 4 quarter final, 2 semi-finals and the final.

Distance: What was the preferred distance for kick outs in the USFC?

There were 3 lengths defined, in accordance with pitch markings, to ensure a level of objectivity could be applied when recording kick length. The 3 lengths were;

1) Short - inside 45m line;

2) Mid - between 45-65m line;

3) Long - beyond 65m line.

Kick out length was judged by where the ball first bounced, or where it would have bounced had it not been for player intervention.
There were more ‘long’ kick outs (40%) than either of the other two lengths (Figure 1). There was plenty of variation, with even the least favoured length, mid, still selected with 24% of kick outs. Short kick outs were taken 36% of the time.

![Figure 1: Kick Out Length.](image)

**Kick out Length and Success Relative to Kick Out Outcome**

Traditionally, kick out success is measured by ability of a team to gain possession from said kick out (Figure 2). **Of 118 short kick outs, possession was gained by the kicking team 95.8% of the time (113 / 118).** When the kick was played to the mid distance, success rate fell to 62.0% (50 / 81). Despite the longer kick out being the preferred option, it was least likely to result in the kicking team gaining possession, with only 49.3% (65 / 132) won by the kicking team. **Ultimately, the shorter the kick out, the more sure a team can be that they will secure possession.**
Kick out outcome and success relative to possession outcome

A concept has existed in the GAA that has largely remained unchallenged, but has been accepted as fact in relation to the game, and, potential success of any team. The concept, that winning the ‘midfield battle’ is vital in determining the outcome of the game.

In the 2015 USFC, 45% of possession won from kick outs resulted in a turnover (Figure 3). Regardless of which team wins kick out possession, almost half will result in possession being lost. On the other side of this being the argument that kick out possession will lead directly to a shot at least 1 in every 2 kick outs. *If a team wins 2 kick outs in succession, regardless of which end the kick is from, it will likely get at least 1 shot away, without the opposition regaining possession.*

These figures add weight to the argument that the *midfield battle is important to success*. If a team can dominate kick out possession, they are likely to get a greater number of shots away. While getting more shots away does not guarantee victory it is another key piece of the puzzle. However, this is another key item of research to be undertaken to establish the importance of number of shots relative to match outcome.
**Kick out length and success relative to possession outcome**

The theoretical reason a long kick out is still preferred relates to the outcome of possession gained. The theory presumably being, the further a goalkeeper kicks the ball away from his goal, the less likely it will result in an opposition shot, and more likely to result in a shot for.

*However, this study has provided evidence to the contrary (Figure 4).* Teams taking a short kick out generated a shot 47% of the time, this is almost 1 in every 2 of their own short kick outs. Furthermore, the short kick out only resulted in a shot against 3% of the time. It should be noted that short kick outs resulted in a turnover 49% of the time. While the subsequent outcome of these turnovers was not assessed in this study it is likely that several of these led directly to opposition shots. Once again, this is a more in-depth study that may need to be undertaken in future.
In figure 4, the key values are the first set of columns (shot against), which should be minimal, and the second set of columns (shot for) which should be maximal. The graph clearly demonstrates short kick outs were the most beneficial option for generating shots for, and limiting shots against. The long kick out actually results in more shots against (28%) than shots for (25%) the kicking team.

**Application**

All data presented points towards short kick outs as the safest method for gaining possession, the most likely to generate a shot for, and, the best at minimising number of shots against. The expected coaching reaction will be to encourage short kick outs. However it is important that coaches understand there are at least 2 ways of applying this information.

**Own Kick out Strategy: What is the best strategy to employ?**

Not surprisingly, a team should aim to retain possession from all their kick outs. While this is not a new revelation, this data confirms this is most likely to happen when choosing a short kick out option. In fact, using this as a guide, a team could retain as much as 95% possession using short kick outs. This equates to 19 out of every 20 kick outs.

Should a team use short kick outs, an estimated 47% will result in a ‘shot for’ at the opposite end of the pitch. Continuing to use 20 kick outs as a guide, the short kick out option will result in between 9-10 shots being created, with possibly only 1 shot against. In contrast, for 20 long kick outs taken a team will only create 5 (25%) shots for, and are likely to offer up 5-6 (28%) shots against.
Opposition Kick out Strategy: How best to combat opposition kick outs?

The other side of the argument is dealing with opposition kick outs. The concept of dropping players back to defensive zones has made it more straightforward for goalkeepers to pick out team mates with short kick outs. Despite having greater numbers in defence, teams who pick up short kick outs have become well conditioned to retain possession and remain patient, to ensure they create a shooting chance. The outcome, as previously stated, that 47% of possessions won from short kick outs result in a shot for.

However, if a team forces an opposition goalkeeper to kick longer, beyond the 65m line, the percentage of possessions resulting in a shot falls to 25%. It also increases chances of the team opposing the kick out getting a shot, from 3% to 28%. Ultimately, it is in the interest of a team opposing a kick out to push up on their opponents, reducing the opportunity to take a short kick out, and force the opposing goalkeeper to kick long. This will reduce the chances of the kicking team gaining possession and subsequently generating a shot, while massively increasing the chances of the non-kicking team gaining possession and creating their own scoring chance.

Coaching Application – How does this information relate to the training pitch?

1. **Goalkeeper**: Training a goalkeeper to be confident in identifying safe, short kick out options and executing the kick accordingly, possibly even training the ability to use both feet in order to help disguise kick selection during their run up. It is also important to have the ability to play a long directed kick should opponents close down short kick out options;

2. **Defenders**: Training defenders to create coherent movement to free up a team mate / themselves for a short kick out. Should they get possession they must be secure in possession. It is vital to ensure ‘first touch’ handling is sound. They must have the ability to carry or transfer possession quickly and securely away from their defensive zone to more advanced areas of the pitch.

3. **Midfielders / Half Forwards**: Training midfielders and half forwards to recognise when opponents have pressed up and are closing down short kick out options. These players will need to be active, creating coherent movement to isolate strong fielders in specific areas, while reacting to the kick and getting in position to gather break ball. It is also important these players are strong under a high ball from a kick out as they may be in position to contest kick outs from both goalkeepers;
4. **Full forwards:** Even with 3 full forwards pushed up, many teams will still retain an extra man (sweeper) in their defensive zone who may become an option for a short kick out. Full forwards and half forwards will need to identify threats and runs made to prevent the opposition goalkeeper having an unopposed short kick out option.

**Caution**

As with all statistical analysis, there are several aspects that require caution as there will be deeper patterns should data be dissected further.

Firstly, 49% of short kick outs result in turnovers, compared to 37% of mid length kick outs and 47% of long kick outs. Bear in mind, short kick outs expose the team in possession to a turnover in any area of the pitch, of particular concern is the possibility of losing possession in their own defensive zone. While this analysis did not measure turnover areas nor subsequent outcomes, there is merit in carrying out such an analysis. The **use of short kick outs should be employed with caution, and an understanding that losing possession in defensive zones is potentially high risk.**

Secondly, data presented is based on inter-county teams and players, playing in the USFC during the summer months. **General patterns may not translate to club football,** but will depend on the level, age grade, weather and even the county in which the game is based. It is important to take into account player ability, conditions, opposition tactics and state of the game when selecting a kick out strategy.

Finally, the data pool selected for this analysis was limited to 8 games, so is relatively small. **If this analysis was extended to include a greater volume of games there may be alternative findings.** There is potential to broaden this analysis to include various teams and fixtures. The data is also likely to be in a constant state of change as coaches and players evolve their tactics.
Summary

This analysis aimed to identify patterns emerging from the USFC 2015 relating to kick outs. Specifically, attempts were made to gauge effectiveness and success of kick outs played to various lengths. Short kick outs offered teams the best chance of gaining possession from their own kick out. They also offered the best opportunity to generate a shot and most effective way of reducing chances of the opposition generating a shot.

It is important that this information is utilised by coaches from both perspectives. It is easy to instruct your own team to use the short kick out, albeit there must be an appreciation of the high risk nature of such a strategy. It is also important to understand the danger of allowing your opponent to use the short kick out, and the potential rewards from making your opposition kick long.

There is huge potential to undertake more in depth analysis on kick out patterns in Gaelic football, both investigating this data in more depth, and extending this same analysis to a more extensive data pool.