Introduction:

Following the introduction of a global trial of the “crouch, bind, set” scrum engagement sequence in May 2013, it is timely to examine the success of the trial’s objectives, its impact on the game at the elite level and the consequences for coaching the scrum. The contest at the scrum has always been one of rugby’s significant points of difference, as acknowledged by International Rugby Board Chairman Bernard Lapasset (2013) who stated: “The scrum is a fundamental and dynamic part of our Game. It is important that we continue to promote the best possible player welfare standards and this trial process is about putting players first and delivering a reduction of the forces on engagement at elite level, which could have significant positive effects on long-term player welfare.” The focus on player welfare is central to the trial and undoubtedly important, with a claimed reduction in impact of up to 25% at the point of engagement at the elite level (IRB, 2013); however, have we witnessed the similarly desired creation of a more stable attacking platform, fewer resets and a higher percentage of completed scrums to ensure that the scrum is a ‘dynamic’ component of the game? To examine the impact of the trial laws in International rugby it is essential to explore the effects of the laws on the scrums in recent fixtures.

Analysis of International Tournaments

The impact of the introduction of the trial laws in 2013 on the scrum through a comparison of The Rugby Championship statistics from 2012 and 2013:

<table>
<thead>
<tr>
<th></th>
<th>Collapses per 100 scrums</th>
<th>Resets per 100 scrums</th>
<th>PK/FKS per 100 scrums</th>
<th>Ball out per 100 scrums</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Rugby Championship 2013*</td>
<td>58</td>
<td>29</td>
<td>40</td>
<td>60</td>
</tr>
<tr>
<td>The Rugby Championship 2012</td>
<td>57</td>
<td>25</td>
<td>31</td>
<td>69</td>
</tr>
</tbody>
</table>

The impact of the trial laws on the scrum as an attacking platform in International Test Matches:

<table>
<thead>
<tr>
<th></th>
<th>Repack %</th>
<th>PK/FK % For</th>
<th>PK/FK % Against</th>
<th>Win % of scrums fed</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>The Rugby Championship 2012</strong> (12 matches)</td>
<td>20%</td>
<td>71%</td>
<td>29%</td>
<td>94.2%</td>
</tr>
<tr>
<td><strong>Six Nations 2013</strong> (15 matches)</td>
<td>18.6%</td>
<td>69%</td>
<td>31%</td>
<td>86.9%</td>
</tr>
<tr>
<td><strong>The Rugby Championship 2013</strong> (12 matches)</td>
<td>18.4%</td>
<td>59%</td>
<td>41%</td>
<td>81.8%</td>
</tr>
<tr>
<td><strong>November Internationals 2013</strong> (20 matches)</td>
<td>17.7%</td>
<td>63%</td>
<td>37%</td>
<td>85.5%</td>
</tr>
</tbody>
</table>


(*matches played using the new trial laws)

Firstly, it is clear that the scrum remains a valid contest for possession in the game – one of the key fears in the rugby community leading up to the implementation of the trial. The reduction in the attacking team’s ability to win possession from the scrum, dropping 12.4% in The Rugby Championship in 2013 when compared to 2012, highlights that teams have found it more challenging to retain the ball and utilise possession from scrums. With the scrum winning percentage from The Rugby Championship in 2013, it is necessary to mention that three of the four competitors won less than 80% of scrums fed in 2013 – the exception being South Africa who won 100% of their scrum feeds and thus inflated the average for the tournament (IRB, 2013).

While the contest for possession is evident, the ‘dynamic’ aspect of the scrum in the game remains questionable. Under the new trial laws, The Rugby Championship in 2013 saw an increase in collapses, penalties/free kicks and a reduction in the attacking team’s ability to clear the ball from the scrum. Although the increases in collapses and resets are minimal, the rise in penalties and the reduction in teams being able to clear the ball from the scrum have impacted on the role of the scrum as an attacking platform in the modern game. Traditionally, teams such as New Zealand and Australia have attempted to use scrum possession as an opportunity to launch their attack, but this has been somewhat stifled under the new trial laws. For example, in The Rugby Championship in 2013 Australia won only 70.6% (91.9% in 2012) of scrums fed while New Zealand won only 78.6% (95.1% in 2012) of the scrums that they fed (The Rugby Analyst, 2013). Furthermore, the rise in penalties/free kicks (up 9%) matches the decline in ball clearances (down 9%) which poses questions regarding the best ways to use scrum possession in the modern game. Additionally, an increase in the percentage of
penalties awarded to defensive scrums when compared to previous competitions leads to further uncertainty for the attacking team.

Tactically, under the previous laws, teams such as Wales have chosen to scrum to exploit an advantage by gaining penalties, which is supported by the following statistics from the 2013 Six Nations Championship:

<table>
<thead>
<tr>
<th>Wales 2013 Six Nations (5 matches)</th>
<th>ScrumFed</th>
<th>Ball Cleared</th>
<th>Penalties For</th>
<th>Penalties Against</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>38</td>
<td>13</td>
<td>20</td>
<td>5</td>
</tr>
</tbody>
</table>


In the November 2013 Internationals, Wales achieved a significantly lower percentage of penalties as opposed to clearing the ball at the scrum, opting to clear the ball an average of 4.8 times out of 6 scrum feeds. Of course, player availability, opposition strengths and other factors may shape these statistics; however, there was a clear change in the way that they used scrum possession under the new laws.

As well, the impact of the trial laws offers numerous considerations for different participants in the game. For the spectator, do more penalties, more collapses and less ball clearances provide an improved spectacle? For coaches, do the laws allow a dominant scrum to exploit this facet of the game to their advantage, as Wales did in the Six Nations, with a reduced penalty advantage being awarded to the attacking team? Furthermore, what are the likely amendments to the attacking philosophies of coaches based on the fact that the likelihood of securing possession on attacking scrums is reduced? Undoubtedly, the more familiar players and coaches become with the laws, the clearer their tactical objectives will become, but as for a positive outcome for spectators, the viewing public may require more time to be convinced.

As the year progressed, there were some positive trends that emerged. During the November 2013 International window, there was an upward trend in the ball winning percentage for attacking scrums, and a slight adjustment in the penalty distribution, which saw a 4% swing back towards the attacking team. In addition, there was a small reduction in the percentage of scrums being repacked. Obviously, experience with the new laws has enabled teams to work through particular strategies to improve their capacity to provide a more reliable attacking platform when feeding the ball at the scrum. So, with this in mind, it is important to analyse these changes and consider the impacts and the adjustments that we may need to make in the way that we coach the scrum.

**Impacts on coaching the scrum**

After observing the matches played under the new trial laws, it is important for coaches to reflect on how we approach the coaching of the scrum to allow our players to best adapt to the new laws. Some of the key changes witnessed so far include:
The engagement

Arguably, the biggest adjustment for scrum coaches will be moving away from the ‘Hit & Chase’ mentality that has been the dominant scrum philosophy in Australia for some time. The new trial laws have reduced the impact on engagement and the ability for teams to ‘win the hit’ and power through their opponents, which is largely a result of referees controlling the timing of the scrum feed – once the scrum is stable. Also, the reduced distance between the two packs has made it more challenging to generate momentum resulting in a more ‘passive’ engagement.

As the laws have changed, so too has the focus of coaches. Now we are seeing the main objective of the engagement shifting to ensure that all eight players are in the best position to generate and transfer pressure post-engagement. This does not mean that the engagement is less important; rather, it is integral to establishing the desired pushing position to function effectively throughout the scrum. Establishing this desired position has resulted in amendments to players’ foot positioning for the engagement.

Foot positioning

Under the new laws, it has become essential for players to position their feet pre-engagement to ensure that:

a) all 16 feet are ‘on the ground’ at the point of contact; and that
b) players do not need to adjust their feet to establish an effective pushing position to generate and transfer power through the scrum post-engagement.

This may not seem too radical a change from previous philosophies on scrumming; however, there has been a significant change in how the ‘Back 5’ positions themselves for the engagement, especially the two locks. Previously, locks have regularly adopted a split stance, sometimes with one knee on the ground while binding to their front rowers. This position leads to the locks needing to make a significant adjustment with their feet to establish an effective pushing position on and after the engagement. With a ‘Hit and Chase’ approach to the scrum, players were afforded enough time and space to make this adjustment.

In response to this changing objective, some International teams, such as Australia and South Africa, have started to position their locks with their feet level, approximately shoulder width apart, and hips square to reduce any need for an adjustment post-engagement. Coincidently, South Africa were the most successful team in The Rugby Championship in 2013 with a 100% winning percentage and received the most penalties/free kicks and conceded the least number of penalties/free kicks in the tournament. Even under the previous laws, this same set-up approach was employed successfully by the Cheetahs in the 2013 Super Rugby season, which saw the Cheetahs win 97.3% of the scrums they fed – the highest in the competition (The Rugby Analyst, 2013). When assembling, some teams are now choosing to have locks and flankers with both knees on the ground, with their feet level. At a designated point in the scrum engagement sequence, the players will lift up off the ground but maintain the desired position with their feet level for the engagement. The success of the Cheetahs suggests that
this change is not solely a result of the new trial laws; rather, it appears, at this stage, to be a more productive way of maximising power output under the changed conditions at the scrum, especially with the referee controlling the timing of the scrum feed.

**The role of the hooker**

The role of the hooker has been scrutinised in the media following the introduction of the trial laws, particularly with regards to player safety. With referees insisting on scrumhalves feeding the ball straight, the hooker’s skill of striking for the ball is paramount in the modern game. Opinion is divided over player safety with defending scrums often choosing to scrum as low as possible to make striking for the ball very difficult, raising player safety concerns given that the referee’s instruction of “Yes, 9” (to invite the scrumhalf to feed the scrum) provides a cue for the defending scrum to exert pressure on the attacking team when the hooker is most vulnerable.

As coaches, it is imperative that we up-skill hookers in the art of striking for the ball – a skill often overlooked at various levels. Striking for the ball is by no means a new skill, and as such, we need to adapt our coaching priorities rather than reinvent the skill. Additionally, the pressures that we have seen exerted on hookers striking for the ball does suggest that we may need to consider the importance of the body shape of front row players in selection and also in development programs. Not surprisingly, taller hookers are likely to find it more challenging to strike the ball from a low body position than a shorter counterpart would. Similar considerations are relevant for props as well, and it would not be too surprising to see the body shape of front rowers potentially revert to those of eras past – predominantly shorter, squat players. Under the previous laws, some teams chose to not strike for the ball and had their pack step through and past the ball on the engagement – an option which will prove difficult with the requirement of a straight feed by the scrumhalf, which emphasises the importance of the strike.

**Tactical adjustments**

From a coaching perspective, it is desirable that the scrum provides a range of tactical opportunities for coaches to:

- a) allow a team to be rewarded for dominance;
- b) allow an attacking team to launch their attack as they choose;
- c) allow the defending team to contest possession; and
- d) restart the game efficiently.

The trial is still in its early stages; however, we have seen teams apply different tactics successfully after having had some time to adjust to the new laws. One of the clearest examples of the contrasting tactics from attacking scrums occurred in the recent Test Match between England and Australia on November 2, 2013. Australia fed the ball seven times into
the scrum clearing the ball on all seven occasions. In contrast, England fed the ball into the scrum on seven occasions, earning five penalties and clearing the ball only twice from the scrum. While England’s tactic may not be to every spectator’s liking, it is clearly effective and allowed them to use their possession in the way that they desired, being rewarded for their efforts at scrum time. Pleasingly, this match does suggest that teams will not necessarily be disadvantaged by having a reduced number of options from the scrum in attack.

Conclusion

What is most clear from the statistical analysis of the new ‘crouch, bind, set’ scrum engagement sequence is that the scrum remains a valid contest for possession, even more so than it has been in previous seasons. Additionally, the laws have allowed teams such as England to use the scrum tactically rather than just as a means to restart the game which will please scrum coaches around the world. On the issue of player welfare, the physical impact upon engagement is clearly reduced; however, we have witnessed growing concerns over the height of the scrum, and we continue to see a relatively large proportion of scrums either collapse or be repacked, which poses player welfare concerns. While the unique nature of the scrum remains, perhaps the most worrying statistics are the rising number of penalties and the number of times that the ball is cleared from the scrum. These may not be the main concerns of some rugby purists; however, in a competitive market place in the sporting landscape, especially in Australia, only additional time to adapt to the laws will decide if they have made the scrum the ‘dynamic’ component of the game that it was intended to be.
Bibliography


