Analysis of the Rugby Game Result through the Rate of Territorial Dominance and Ball Possession

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Abstract: This research aims to analyse the determination of rugby game results, as a consequence of territorial dominance or ball possession, by the teams participating in the 2015 Rugby World Cup. The objectives of our scientific approach were to record the variables linked to possession and territorial dominance in the rugby games and to process and interpret the results. In this applicative research, 48 matches were analysed, tracking total territorial dominance and sequential territorial dominance in the last 10 minutes of the game, as well as total possession and sequential possession in the last 10 minutes of the game. The research methods used are: scientific documentation, observation, measurement, statistical and mathematical method, graphical method. The results obtained from data processing and interpretation are contradictory. Thus, we have results displayed accordingly, when the team with total and sequential territorial dominance and superior total and sequential possession wins the game, but also when the team with total and sequential territorial dominance and superior total and sequential possession loses the game. We have results when the team with total territorial dominance and superior total possession wins the game, which is normal, but also results when the team with territorial dominance only in the last 10 minutes and superior possession only in the last 10 minutes wins the game. We might consider that these results are not a first, that they represent the exception, but what the research emphasises are the proportions between the results considered normal and those contradictory, which may generate questions and answers about the competition strategy.

Keywords: Grounded Theory, qualitative research, social constructivism, interpretive model, data encoding.

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Introduction

This research aims to analyse the determination of rugby game results, as a consequence of territorial dominance or ball possession, by the teams participating in the 2015 Rugby World Cup.

In 2005, (Van Rooyen, I., & Noakes, 2005) made a retrospective analysis of the performance achieved by four teams during the 2003 World Cup and found three performance variables: number of penalty kicks, number of drop goals scored and percentage possession. Normally, they highlighted that the winning teams had superior possession also resulting from their play based on regaining possession in defence.

Other research has revealed that certain factors, among which possession and territorial dominance, contribute to successful performances in competitions (Hughes & White, 1996) (O’Donoghue & Williams, 2005). Moreover, (James, Mellalieu, & Jones, 2005) have concluded that there are many different game strategies, and all of them can be equally efficient for a team in the same tactical context.

In 2010, (Vaz, Van Rooyen, & Sampaio, 2010) suggested that the Super Rugby winning teams had superior possession in the opponent’s field, which was converted into points. They also noticed that, in regional competitions, the kicking-based game strategies were preferred to those based on ball possession.

Methods

The objectives of our scientific approach were to record the variables linked to possession and territorial dominance in the rugby games and to process and interpret the results. In this applicative research, 48 matches were analysed, tracking total territorial dominance and sequential territorial dominance in the last 10 minutes of the game, as well as total possession and sequential possession in the last 10 minutes of the game.

The research methods used are: scientific documentation, observation, measurement, statistical and mathematical method, graphical method.

Results

The results obtained from data processing and interpretation can be considered normal, but also contradictory. Thus, we have results displayed accordingly, when the team with total and sequential territorial dominance and superior total and sequential possession wins the game, namely 19 matches representing 39.58% of the total games, but also when the team with total and
sequential territorial dominance and superior total and sequential possession loses the game, namely 9 matches representing 18.75% of the total games. Therefore, we notice that there is an extremely high percentage of negative results for the teams dominating the game in all parameters, namely 32.14% of the total games, which has highlighted this feature.

At the same time, we have results showing that the team with total territorial dominance and superior total possession wins the game, namely 12 matches representing 25% of the total games, but also that the team with territorial dominance only in the last 10 minutes and superior possession only in the last 10 minutes wins the game, namely 5 matches representing 10.41% of the total games, which does not mean a notable percentage, but represents more than the “exception”.

Figure 1

Figure 2
As regards the total territorial dominance parameter, we notice that, out of the total 48 games, only 33 have been synonymous with victory, representing 68.75%, compared to 15 games representing 31.25%, in which the teams with territorial dominance have lost.

The sequential territorial dominance, namely in the last 10 minutes of the game, indicates a success rate almost equal to the failure rate, meaning that victories have been recorded in only 25 matches representing 52.08%, compared to 23 lost matches representing 47.92%.

We also notice that in 30 games, namely 62.5%, the teams have achieved total and sequential territorial dominance, but won only 21 of them and lost 9, meaning 70% and 30%, respectively. Out of the total 48 matches, the team with total territorial dominance is dominated by the opponent in the last 10 minutes, which is the case for 16 teams representing 33.33%. In
other words, at the end of the games, there is a reply from the dominated teams who try to change the result, which induces an adjustment of the competition strategy in order to prevent this phenomenon.

As regards total possession, we can state that we have recorded a notable percentage of teams who, despite their superior total possession, have lost the game. Thus, in only 32 matches, namely 66.66%, the team with superior total possession won, while in the remaining 33.34%, the teams were defeated.

As regards sequential possession, we can state that the teams with higher values have recorded more defeats, 54.17%, than victories, 45.83%. For the picture to be complete, we must say that, out of this percentage, only 10.41% represent teams with only sequential, not total superiority, who have won the victory.
At the same time, we have a number of 27 games in which one of the teams has recorded superiority in terms of both total possession and sequential possession. Naturally, in the rugby game, such overwhelming possession is associated with victory. However, the data processing reveals that only 62.96% of teams have won the victory, the remaining 31.04% being defeated.

![Figure 7](image)

**Discussion**

- After processing the results, we notice that total and sequential territorial dominance has generated victories in a percentage of 68.75% and 52.08%, respectively, compared to total and sequential possession that has generated victories in only a percentage of 66.66% and 45.83%, respectively, which leads to the conclusion that territorial dominance guarantees more success compared to ball possession. In other words, the winning teams, due to their territorial dominance over the opponent, have made aggressive and efficient defensive pressing in the opponent's field;

- Logically, the team having territorial dominance over the opponent and superior possession should win the game, but the result processing reveals that, out of the 28 matches where a team showed these characteristics, in only 2/3 of these situations, namely 19 games, they have won the victory. Thus, we can state that total territorial dominance and total possession are the defining parameters in the competition strategy, but not absolute guarantees of success;

- The superiority of sequential possession has generated success in only 10% of the cases, which is not a significant percentage, but to keep in mind. Instead, what we have noticed after processing the data indicates that
this parameter, doubled by sequential territorial dominance, can change the result in favour of the team who achieves this;

• At the same time, there have been recorded results in which the team with total and sequential territorial dominance and superior total and sequential possession loses the game, namely 9 matches out of the 28 games had these characteristics, that is 32.14%, or 9 matches out of the total 48 games, representing 18.75%. Both percentages are notable and reflect the perspective that a team dominated in all four parameters has success through an efficient defensive play supported by a very high physical and psychological potential;

• Also in this respect, we have a number of 27 games in which one of the teams has recorded superiority in terms of both total and sequential possession, meaning overwhelming possession, which, in the rugby game, is associated with victory. However, the data processing reveals that only 62.96% of teams have won the victory, the remaining 31.04% being defeated. In the Rugby 7s, too, the probability of victory induced by superior possession is 55% (Liberman, 2016). How is it possible to have superior possession throughout the game and lose the game? Only by practicing an offensive play that retains the possession but does not penetrate the opposing defence, does not exceed the advantage line, does not materialise in points, in other words, by playing a sterile offensive game;

• Also, of the total games, we have recorded situations where the team with total territorial dominance is dominated by the opponent in the last 10 minutes, which is the case for 16 teams representing 33.33%. Thus, we can conclude that, at the end of the games, there is a reply from the dominated teams who try to change the result, which indicates the need for adjusting the competition strategies to this phenomenon.

Conclusion

• We believe that the results obtained from data processing and interpretation are interesting since they highlight the proportions between the results considered normal and the contradictory ones.

• Their qualitative analysis highlights that the proportion of results that can be considered contradictory is significant, they do not represent the exception, and this phenomenon may generate questions and answers about the competition strategy.

• The result interpretation suggests that defensive strategies supported by a very high physical and psychological potential have improved and are more efficient than offensive strategies.
• The significant percentage of change in the sequential possession and sequential territorial dominance variables during the last 10 minutes of the game, and even the change in the game result, denote the need for teams to maintain efficiency until the end of the match.

• Territorial domination and possession are defining variables, but not absolute guarantees of success.

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