

DETECTING PATTERNS OF PLAY IN FOOTBALL

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Introduction

The importance of observation in sport is enormous if given the necessary objectivity, accuracy and procedural effectiveness. However, the game of football is characterized by a great complexity of constraints that make it difficult to objectify its observation and analysis. The aim of this study was to test the effectiveness of the Observational Methodology for the analysis of the football game, using the observational instrument developed by Sarmento et al. (2010); and its application to the analysis of the offensive plays of Football Club Internazionale Milano.

Methods

The observation of the football matches was done through television broadcasts. Twelve (6 home / 6 away; 2009 / 2010 season) F. C. Internazionale Milano matches were analyzed. For the detection of temporal patterns we used the software THEME.

Results & Discussion

Data analysis resulted in the coding of 189 offensive sequences (108 home / 81 away) resulting from 2955 rows code (1576 home / 1479 away). The software allows a frequency of analysis of events that provided important information about the various game categories analyzed (i.e. type of offensive game method, zone of the field where the offensive process starts, zone of the field where the offensive process ends, type of pass, direction of the pass, interaction context, etc...). Further, its main valence is to enable the detection of behavioral patterns with a temporal / sequential structure that cannot be detected by the "naked eye". We found the existence of several patterns of play, like the example shown in Figure 1, which will be presented in detail.

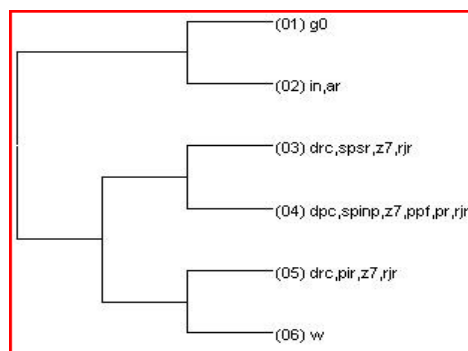


Figure 1 - An example of a detected T-Pattern

Conclusion

The analysis of these patterns, coupled with information obtained from basic statistics and the understanding that coaches have in relation to this structured behavior, may have a significant contribution for sports performance optimization.

References

Sarmento, H. et al. (2010). *Medicina (Kaunas)*, 46, 6, 401-407.