## Performance Point

Turnovers as Performance Indicators for Game Analysis in Team Sports



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One purpose of performance analysis in a coaching context is to provide precise feedback to athletes. In team sports, performance is a result of many factors interacting in dynamic and ever-changing situations. Computer-based systems can help to integrate quantitative performance data with video data. These systems can be tailored for use with any sport using specific performance indicators that are of significance to the coaches and athletes in their respective sport.

Performance indicators are often investigated and developed in order to identify fundamental elements and factors for enhancement of performance in sports. In order to identify valid performance indicators it is important that the indicators used within a performance analysis system differentiate between the successful and unsuccessful events within a game (Hughes and Bartlett, 2002).

Last summer, Canadian Sport Centre Pacific worked with the Canadian Wheelchair Rugby Team in preparation for the 2006 World Championships. The focus was to study successful and unsuccessful teams in major tournaments, and turnovers proved to be a major performance indicator. Through examining how turnovers occurred, coaches were able to design the most effective ways to create and retain possession, which in turn, increased goal opportunities.

With team sports, in order to classify the actions observed, Canadian Sport Centre Pacific has developed a Model for Turnover Analysis, as seen in *Figure 1*. Turnovers are analysed as a factor of space definition (where did it happen?), time definition (when did it happen?) and personnel identification (who was involved?).

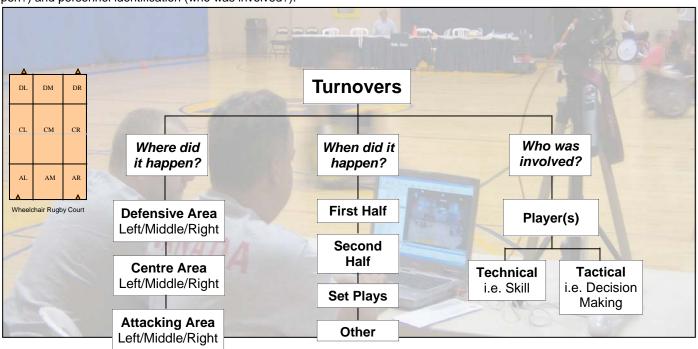


Figure 1. A Model for turnover analysis.

Assistant Coach Adam Frost and Head Coach Benoit Labrecque with the Canadian Wheelchair Rugby Team, 2006 World Championship Bronze Medalists.

The identification of relevant performance indicators that distinguish between successful and unsuccessful performance should be the first stage in the development of a team sport performance analysis system. The statistical information and video data provided by performance analysis systems such as Dartfish, can identify areas that require attention; i.e. possession losses. Observation of the relevant sequences as to how events occur allows the coaches to identify exactly why possessions are being lost, and this can be properly addressed in practice sessions and/or in timely feedback interventions during competition.

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