# The Use of Performance Analysis and Feedback within the Elite Olympic/Paralympic Sports Environment.

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## Introduction

Performance analysis is a vitally important tool within the coaching process by virtue of a coach's need to provide purposeful information to enhance performance. Unfortunately, research is often concerned with the 'what' of performance analysis through developing the method (e.g. KPIs, reliability) and as consequence, the 'how' or use of this information appears to have become a secondary, less important aspect. Specifically, research guides the reader through the data collection aspects of performance analysis, yet fails to offer insight into how the information is utilised or how feedback sessions are structured within practice. Aside from Wright et al. (2012; 2013; 2014) and Groom (2012) there is a dearth of information outside of football investigating the delivery of information within applied environments. Before we can begin to enhance feedback, we must outline the landscape and identify what is delivered, when is information fed back, how it is delivered and, why is practice implemented like it is. Therefore the aim of the study was twofold, to; 1) outline the current feedback landscape through an understanding of the what, how, when and why of practice and 2) explore the role and utilisation of the performance analyst.

# Method

Twenty (Age;  $29 \pm 5$ ) Performance Analysts (PAs) working within Olympic/Paralympic sport completed a questionnaire (lasting ~84 minutes) consisting of themes related to the; 1) use of competition/training video/data, 2) analysis process, and 3) feedback process. The questions incorporated both open/closed aspects and designed to enable context cross-comparison whilst offering flexibility for the participant to provide additional information behind their practice where appropriate.

# **Results**

Participants undertake all types of analysis at varying consistency, however Pre/Post-competition is the focus. 'Coach mostly with PA input' was the primary method of deciding what aspects to analyse, however the Performance Director was a secondary decision maker. 'Coaches' Experience/Philosophy' and a lesser extent the 'PA's Experience' are the main influencing factors. Majority of participants (79 %) maintain consistency within specific areas of feedback but each may differ from one another. 42 % of participants review feedback annually whilst 42 % did when they learnt of new methods. Coaches appear to lead feedback sessions following coach/PA discussion, however PAs appeared to lead data heavy sessions. Current feedback session length was < 5 minutes but was often followed up with a 25-30 minute session. However, PAs favoured a shift towards 10-20 minute feedback sessions. 'Time' was the most frequent factor impinging on the PAs ability to feedback. Other significant barriers were the 'Receptiveness to PA/Feedback' and 'Concerns of Feeding Back Too Much'.

## **Discussion & Conclusion**

The effectiveness of the coach/PA relationship within elite Olympic/Paralympic sport seems to depend on coach experience/philosophy. The time available for performance analysis feedback provision then dictates the duration and timing of the intervention. The knowledge identified and presented herein provides insight into what practice currently takes place within the performance analysis system, and as such, will aim to inform the wider strategy of performance analysis moving forward whilst offering practitioners the opportunity to learn processes individually and/or sport-to-sport. Whilst inter-team differences will and do inevitably exist, the move toward an optimal feedback situation seems to be approaching.

## References

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