1. Summary of the impact (indicative maximum 100 words)

Recent research through the Applied Psychology Research Centre into sports officiating at Glyndŵr University has helped to create a national level referee performance model that is being used to identify and train emerging talent. The model is currently being used with the Rugby Football Union (RFU) English national panel of referee coaches.

2. Underpinning research (indicative maximum 500 words)

Previous research into the psychological and performance demands of rugby union refereeing identified four cornerstones to the performance demands of refereeing as (i) knowledge and application of the law (ii) contextual and material judgment, (iii) personality and game management, and (iv) physical fitness factors. Until now, this was the performance model adopted by the RFU in England to develop elite refereeing expertise.

Further research has been based on interviews conducted in 2011 with international rugby union referees (reference 3), and a study of training international netball (reference 4) and hockey teams (reference 2) that built on empirically tested decision making principles (references 1, 5) to look at models to develop decision making skills through reflection and intra/interpersonal analysis).

Following analysis of the interviews with international rugby union referees regarding their decision making and decision communication, four key themes were identified: corporate theatre, self-analysis, decision approach/philosophy and within-game psychological skills. These have now been merged with the previous four cornerstones model to form a unified model (Fig.1).

The original and unique aspects of this model are the areas of Referee Theatre, recognising the
need to communicate effectively to a range of audiences (such as the players, coaches, the crowd, spectators and television commentators). In addition the research identified the importance of Analysis skills, by conducting pre-game simulations (visual imagery), template building (shared mental models) and decision reviewing (self-reflection) in order to develop expertise.
consultation with RFU referees in January 2014 in order to further develop the implementation of the model and discuss on-going research into psychological skills for referees.

5. **Sources to corroborate the impact** (indicative maximum of 10 references)

RFU North West Referee Development Manager