SCRIPTIONS AND DEFINITIONS FOR THE RUGBY LEAGUE TACK

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INTRODUCTION

Research within Rugby league (RL) tackle investigations using video analysis has often used two sources of variables. The exception being King et al (2010) who described the characteristics of the RL tackle event such as number of tacklers and tackle height of the first tackler. However, the majority of investigations have either adopted technical variables from rugby union (RU) tackle variables (Sperenza et al., 2017) or technical criteria from coaching cues (Gabbett, 2008). In doing so, content validity and relevance to RL could be questioned (O'Donoghue, 2014). The aim of this study was to adopt a 5 stage process to determine tackle variables which are valid and reliable for RL research.

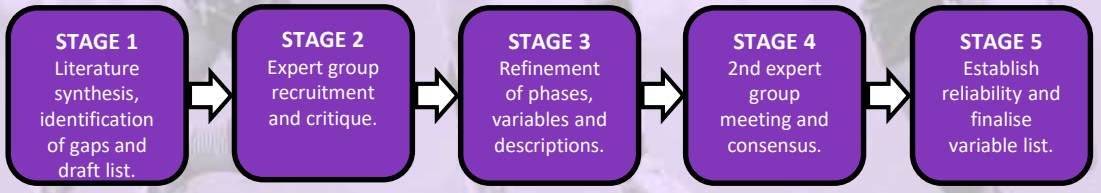
METHODS

A 5 stage process was undertaken based upon recommendations by O'Donoghue (2014). STAGE 1 involved a synthesis of literature and examined phases of the tackle, variables describing the tackle descriptions of these variables research. A draft variable list was then developed before the start of STAGE 2. To achieve content validity and relevancy, STAGE 2 formed an expert group of practitioners to critique the previously formed draft variable list and develop new phases, variables and descriptors. STAGE 3 refined the variable list based upon the practitioner consultation. STAGE 4 established an expert group agreement in the refined variable list. Finally, STAGE 5 tested intra and inter-reliability of the list using Kappa statistics (McHugh, 2012).

RESULTS

The agreed variable list comprised of 6 phases including defensive start point, pre-contact, initial contact, post-contact and play the ball phases. Within the phases 66 variables were determined. The intra- and inter-reliability testing resulted in at least moderate agreement (>0.7) (McHugh, 2012) of all phases.

The 5 stage process resulted in an agreed variable list comprising of 66 variables within 6 phases of a tackle. The findings provide unique rugby league specific variables to be used in future research.



Take a picture to download the full variable list.

AGREED PHASES (DOWNLOADABLE VIA QR CODE)

Agreed phase	Descriptions
Match Event	Variables which describe the overall scenerio of which the tackle has occurred.
Defensive start point	Variables which describe where defensive players were positioned between the end of the play the ball to initial contact.
Pre-contact phase	Variables which occur from 0.5 seconds before contact to initial contact for both tackler(s) and ball carrier (Figure 2).

Figure 2. Example of a pre-contact phase.

Initial contact phase	Variables which occur immediately at first point of contact between ball carrier and tackler(s).
Post-contact phase	Variables which occur between initial contact and the tackle end, which is either by grounding of the tackler or called by the referee (Figure 3).

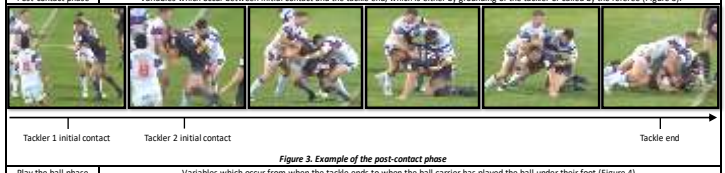


Figure 3. Example of the post-contact phase

Play the ball phase	Variables which occur from when the tackle ends to when the ball carrier has played the ball under their foot (Figure 4).

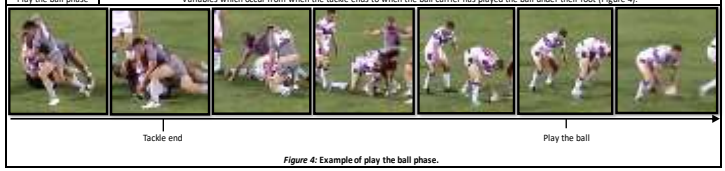


Figure 4: Example of play the ball phase.

DISCUSSION

Due to possessing both strong relevance to an RL tackle and demonstrating good levels of reliability, researchers can be confident that the variables within the list are valid for research purposes (O'Donoghue, 2014). In addition, the rigorous 5 stage process of validating the content of the variable list should be used when determining different variables within different sports and actions for research purposes. In doing so, researchers can be confident that they are valid in use and thus can be used consistently for research purposes. Furthermore, the findings show that although there are similarities between a RU and RL tackle, clear differences exist and therefore justifies the need for specific RL variables during tackle research.

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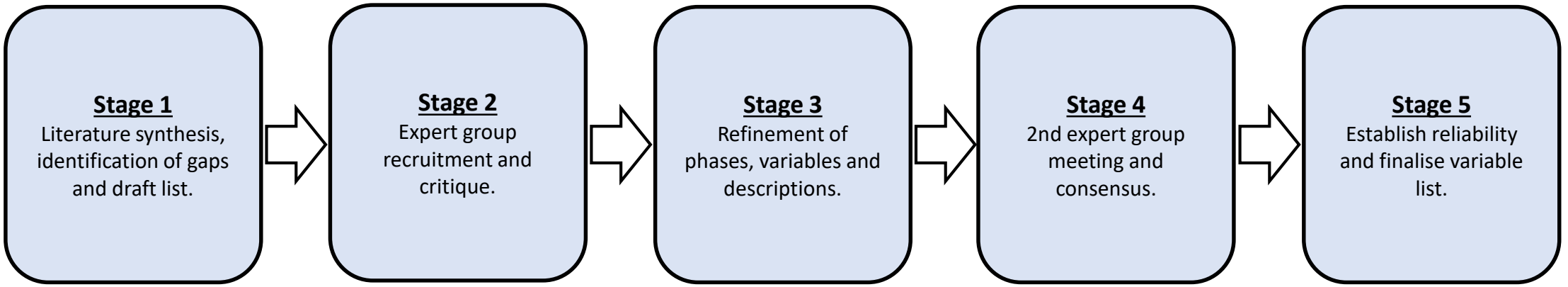
Conference and research funding was supplied by the Carnegie School of Sport.



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Study findings:

1. The variable list comprised of 66 variables from 6 different tackle phases.
2. The 5 stage process was successful in creating variables which are both reliable and relevant.
3. The RL tackle is unique and requires specific variables to describe the scenario.

Please feel free to download the variables lists using the QR code on the e-poster.

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