Reviewer’s report

Title: A systematic review investigating measurement properties of physiological tests in rugby

Version: 0 Date: 23 Jun 2017

Reviewer: Kevin Till

Reviewer's report:

General Comments

Thank you for the opportunity to review this paper. I congratulate the authors on such a thorough and well produced review. I really enjoyed reading this and the quality of the review performed, which was very well written and presented (particularly the tables) throughout. I have made some comments below, which are generally minimal. My main area for improvements is that I do think a large number of studies, that I believe meet the inclusion criteria for stage 1, have been omitted from the review. I provide a list of references (based on a recent review I performed) of papers that could be included. I hope this improves the quality of the paper and helps cover all aspects of physiological testing for rugby.

Specific Comments

Line 9 - Rugby League was a professional sport before 1995. Please address (or is this even needed)?

Lines 12 -17 - Would some further references demonstrating differentiation of characteristics between playing levels and future career success add to your concluding statement in this paragraph?

Lines 18-22 - Any other purposes of testing (e.g., talent identification) that could be included here?

Line 23 - What do you mean by measurement properties (e.g., validity and reliability)? This is mentioned on line 38 - I'd suggest including earlier too

Line 61 - RU and RL not previously abbreviated

The review is comprehensive but I do think that a large number of studies have been omitted from the review (which I believe match your inclusion criteria). Having just done a review on the physical qualities of youth RL players I am aware of this. See references below
Although no studies looking at flexibility, there are studies that use the FMS in rugby players. Should these be included?

Is Table 2 showing that for some measures, studies have used the same fitness test but are using different terminology to describe what it measures (e.g., Yo-Yo - prolonged high intensity running ability vs endurance)?

Should change of direction / agility be separate constructs? I believe they should.

There is no Figure 2 - unless Figure 2 has been labelled figure 3.

References needed

Could you expand on the sentence to explain further please

Good recommendation and I totally agree but from my own experiences journals seem generally reluctant to accept such studies.

References


Are the methods appropriate and well described?
If not, please specify what is required in your comments to the authors.

Yes

Does the work include the necessary controls?
If not, please specify which controls are required in your comments to the authors.

Unable to assess

Are the conclusions drawn adequately supported by the data shown?
If not, please explain in your comments to the authors.

Yes

Are you able to assess any statistics in the manuscript or would you recommend an additional statistical review?
If an additional statistical review is recommended, please specify what aspects require further assessment in your comments to the editors.

Not relevant to this manuscript

Quality of written English
Please indicate the quality of language in the manuscript:

Acceptable

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If you can answer no to all of the above, write 'I declare that I have no competing interests' below. If your reply is yes to any, please give details below.

Yes for question 6. I have written a book chapter on fitness testing for rugby and intended to write a review paper but the current review supersedes that.

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