Author's response to reviews

Title: An investigation of motor learning during side-step cutting, design of a randomised controlled trial.

Authors:

Anne Benjamise (a.benjaminse@med.umcg.nl)
Koen A.P.M. Lemmink (k.a.p.m.lemmink@rug.nl)
Ron L. Diercks (r.l.diercks@orth.umcg.nl)
Bert Otten (e.otten@med.umcg.nl)

Version: 4 Date: 5 September 2010

Author's response to reviews: see over
Subject: Revision Ms. No. 1590778641365298
An investigation of motor learning during side-step cutting, design of a randomised controlled trial.
Anne Benjaminse, Koen A.P.M. Lemmink, Ron L. Diercks and Bert Otten

Dear Dr. Shipley:

Thank you for your e-mail dated August 19 2010. Please, find enclosed the revised manuscript. We have revised the manuscript by the modifications based on the comments made by the reviewer. The revisions are conducted with ‘tracking’.

In addition, please find enclosed our point-by-point response to the comments raised by the reviewer. In the responses I have referenced the specific location in which we made changes based on the comments.

Thank you for the opportunity to revise the manuscript to make it acceptable for publication.

On behalf of the co-authors, sincerely,

[Signature]

Groningen, September 5th, 2010
Reviewer’s report Title: An investigation of motor learning during side-step cutting, design of a randomised controlled trial.

Version: 3 Date: 4 August 2010
Reviewer: Jay Hertel

Reviewer’s report:
Major Compulsory Revisions

Page 7, Line 7: “We considered this difference in knee abduction moment as clinical relevant, as it means rupturing the ACL or not.” This statement is not valid. The subjects in the Hewett et al. study did not rupture their ACLs during the measurement of these kinetic values. These mean difference was predictive of ACL injury occurrence, but no ACL were ruptured when these measures were taken. Suggested revision “We considered this mean difference in knee abduction moment to be clinically relevant, as it was predictive of ACL injury occurrence in a prospective study.”

A: Thank you for this remark. You are completely right and we’ve added the rewording you have suggested which is the correct translation of the study by Hewett et al.

Page 7, Line 15: “Basketball players and an age- and activity level-matched female and male control group (also 15 subjects per gender) will be included for this study.” In the previous paragraph you stated that there would 40 subjects (20 per gender) in each of the 3 groups. Which is it, 40 or 30 per group? Also, will the control group subjects not be basketball players? As it reads now, it seems that the implicit and explicit feedback groups will be basketball players but the control group will be ”an age and activity-level matched control group”. This would seem to be a confounding factor in performance on the cutting tasks. Please clarify.

A: I regret that confusing has raised. Yes, the control group will definitely be basketball players and will therefore not be a confounding factor. The sentence on page 7, line 15 has been clarified. So there will be 3 groups, all with 40 subjects, which makes 120 subjects total. In each group (with n=40) will be 20 females and 20 males. For clarification, the groups have been added in the power analysis section.

Page 13, 1st full paragraph, 2nd sentence: Please revise this sentence to improve clarity. This is essential for the reader to understand the planned analysis. Should the semi-colon after “effects” be an apostrophe?

A: This sentence has been revised. Also, no the semi-colon was not meant to be an apostrophe, but a period.

Minor Essential Revisions

Page 3, last sentence: Revise to read “The purpose of this research project is to highlight the issue of motor learning in optimising sports performance in a manner consistent with ACL injury prevention.”
Page 6-8, “Study Population”: I strongly recommend changing the order of the 2 paragraphs in this section. First, explain the characteristics of the proposed subjects, then justify the sample size.

A: Thank you for this comment. This totally makes sense and we have changed the order of these paragraphs.

Page 13, last sentence: Revise to read “...in optimising sports performance in a manner consistent with ACL injury prevention.”

A: This has been revised accordingly.

Table 1: Include sample size for each group in this table. In my previous review, I requested a CONSORT flow chart to illustrate the planned flow of subjects through the study. This is no longer needed because of the edits made to Table 1.

A: Sample size has been included now.

Level of interest: An article whose findings are important to those with closely related research interests

Quality of written English: Acceptable

Statistical review: No, the manuscript does not need to be seen by a statistician.

Declaration of competing interests: I declare that I have no competing interests.