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.”

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.

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?

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.

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

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.

**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.