Reviewer's report

Title: Physical and mental health impact of a sport-for-development intervention in a post-conflict setting: randomised controlled trial nested within an observational study of adolescents in Gulu, Uganda

Version: 2 Date: 18 February 2014

Reviewer: Robin Callister

Reviewer's report:

Overview
The study reported in this manuscript investigated the effects of a sport-for-development football (soccer) intervention on aspects of physical and mental health of 11-14 year old boys and girls in Uganda. The study had a mixed/nested design but very clearly explained. This may be a problem for purists but I thought it reflected the pragmatism required to conduct research in such an environment. The intervention had no effects on physical fitness/health but a negative effect on mental health in boys, and no effect on either aspect of health in girls. It is important that this study that did not have large positive effects, and even some negative effects, is published.

Major Revisions
The major change recommended is to indicate explicitly the lack of effect (either positive or negative) on girls in the abstract, opening paragraph of the discussion, and conclusion. These three sections have clear statements regarding boys but not girls.

Is the magnitude of the negative effect on the intervention boys’ mental health substantial? For readers unfamiliar with the assessment tools, some indication of what these values represent in regards to mood state and whether these are small or large changes would be valuable.

Given the proposed explanation for the negative impact on mental health in boys is that the intervention exposed the boys to new stressors (value placed on winning/performing well) was there an observation that the girls’ competition lacked this focus on winning?

Is it possible in boys that there was substantial expectation associated with participation in the program that was not met in the intervention boys but was still present in the control boys while they were waiting for the program to start? In comparison, did girls have lower expectations of what the program would deliver or were they more oriented to the community-building aspects of the program? Was the marketing of the programs the same to boys and girls? Is there any way to tease any of these aspects out of the study?

For consideration – would you expect one training session and one game per
week to be sufficient training to improve aerobic fitness (MFT)? Should this be considered a limitation of the intervention (as opposed to the study design)?

Minor revisions
Some redundancy in background and study setting/participants (emerging from war aspect)
Tables 4 and 6 – indicators of statistical effects in top section of tables – the symbols chosen are difficult to discern; I would recommend changing these to more easily recognisable symbols OR letters

Discretionary revisions
Baseline physical performances – higher for SBJ but lower for MFT compared to global norms. Are there any local PA preferences or body structure/composition characteristics that might be reflected in these differences?

**Level of interest:** An article of importance in its field

**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