Reviewer's report

Title: Who stays, who drops out? Biosocial predictors of adherence in participants attending a longer term exercise referral scheme in the UK

Version: 1 Date: 11 August 2011

Reviewer: Anne Vuillemin

Reviewer's report:

The writing of this paper is good and the topic is of major interest in the field of physical activity and health.

Major compulsory revisions
The objective of the paper is not enough clear for the reader, neither in the text nor in the abstract.

p4. It would be useful to provide the reader a reference for the definition of ERS.

p5. The reviewer is not certain that “mixed methods evaluation” is understandable? Please clarify “mixed”.

p5. Where do 58% and 45% come from?

p6. How the 1089 participants were registered? How were they recruited?

p7. Adherers and non-adherers were defined on the basis of attendance <80% of scheduled sessions. How this choice of 80% was made? Can we consider that attendance over 80% is associated with health benefits?

p8. “Although they are continuous in nature….practice.” The argument is receivable. However, because the authors are interested in predictors, an analysis with continuous variable could have been more powerful.

p8. Because the level of physical activity and the level of adherence are different between men and women, an analysis by gender would be interesting. Some results have shown that men were more likely to attend exercise sessions despite lower referral rates.

Do some interactions have been tested (with gender or social conditions)?

Discussion: was the intervention appropriate for individuals who get referred? A discussion on appropriate referral could be added.

It seems that a contradiction appears in the literature: results showed the positive effect on physical activity levels on the short-term but a low adherence and ineffective effects in increasing activity level in the long term and a higher adherence?

p12. A reference should be added to illustrate the 1st paragraph.
In the last phrase of the 1st paragraph what does mean “them”

p13. In the study limitations, the authors should add a limitation. The level of physical activity at baseline was not reported. It can be suggested that adherence to the exercise intervention may be higher in participants more active at baseline? If these data are available, it would be interesting to look at this point.

Minor essential revisions
p4. Add a point at the end of the 1st phrase, after [1,2] .

Discretionary revisions
In the background of the abstract the authors refer to “…the maintenance stage”. Does this stage correspond to the stage of change from Prochaska? If yes, it would be interesting to introduce these stages in the paper.

p7. Medical referral category was collected and 4 were identified in the paper. How many categories exist in total?

p8. The authors mentioned 7 deprivation domains. What are these domains?

**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'