Reviewer's report

Title: Physical inactivity and socioeconomic status in Italian adolescents

Version: 1 Date: 23 August 2005

Reviewer: Tuija Tammelin

Reviewer's report:

General

The results of this study in Italian population confirm the earlier findings of the relationship between the socioeconomic status of the family and adolescents' physical activity. The main problems in this paper are 1) inaccurate description of the methods and 2) the use of marginal groups as reference groups in regression analyses. Major revisions are suggested below.

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Major Compulsory Revisions (that the author must respond to before a decision on publication can be reached)

1. The title of this article is not descriptive. The term 'physical inactivity' is not mentioned after the title page. The article mainly describes participation in extra-curricular physical activity.

2. Abstract is encouraged to be rewritten. The methods: How was physical activity evaluated? What was the outcome measure and how was it defined? The term 'fundamental role' is maybe exaggerated...because in this report the role of several other potential factors affecting physical activity was not evaluated. Conclusions could be presented more accurately, for instance: ...positive relationship between participation in extra-curricular physical activity and their families high SES.

3. The methods are not described accurately enough to understand the analyses completely and to replicate the work. What kind of questions were used to measure physical activity of adolescents and their parents? What classifications were used? What was the outcome measure in the logistic regression analyses? This is not defined accurately enough. Maybe participation in extra-curricular activities? All those 71.1.%? How was this economic family index formed? How many families were classified into different groups: very high, high etc.

4. In the analyses, the main problem is to use very small, marginal, groups as reference group in the logistic regression analyses: only 1.4 % of fathers were unemployed and only 6.5 % of fathers had 'primary school' educational level. Data is encouraged be reanalysed and to use more representative group as reference group, for instance: 'non skilled workers' and 'junior high school or less'.

5. The results describing the figures 1-4 should be presented in more compact format. The values (%) could be added into the figures and not to be presented in the text.

6. The discussion of the results is quite limited. The discussion should shortly present the strength and limitations of this study. I would like see some discussion about how well the adolescents are able to evaluate the physical activity of their parents? Authors suggest that SES plays a key role in determining extra-curricular physical activity. What are the factors explaining the relationship between SES and physical activity, financial aspects vs social and mental capital? What is the role of other important factors such as the physical activity of friends and siblings?
Minor Essential Revisions (such as missing labels on figures, or the wrong use of a term, which the author can be trusted to correct)

1. Covariate 'age-group' is not described in table 2, why not?
2. Father's and mother's physical activity: is the group 'no' (table 2) the same groups as group 'absent' in table 1

Discretionary Revisions (which the author can choose to ignore)

What next?: Unable to decide on acceptance or rejection until the authors have responded to the major compulsory revisions

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

Quality of written English: Needs some language corrections before being published

Statistical review: No

Declaration of competing interests:

I declare that I have no competing interests.