Reviewer's report

Title: Are lifestyle-factors in adolescence predictors for adult low back pain? A cross-sectional and prospective study of young twins.

Version: 2 Date: 12 December 2005

Reviewer: Päivi Leino-Arjas

Reviewer's report:

General

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

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Minor Essential Revisions (such as missing labels on figures, or the wrong use of a term, which the author can be trusted to correct)

The title and the paper do read better now. However, there's still some non-clarity or carelessness of expression.

The first sentence in the introduction: reformulate e.g. to "...common, comprised 50 % of all...". 'Musculoskeletal disorders' is in plural form (1st and 2nd sentence). 3rd sentence: 'indicates' rather than 'reflects'. Intro 2nd para, 2nd sentence, add 'and': "...nature of LBP, and they..." Somewhat later, add 'been': "... have not been established."

The material and methods section still repeats text on the measured variables; the para on "Variables" and the ones on "Outcome variables" and "Predictor variables" could be merged.

Instead of 'prevalent LBP' and 'future LBP' I would use 'LBP at baseline' as a complement to 'LBP at follow-up', although neither is strictly correct.

It is not always obvious which outcome variable (any LBP or LBP for more than 30 days) is referred to in the text when 'LBP' is mentioned. The terms 'LBP', 'persistent LBP', 'LBP-long', and 'long-lasting LBP' are all used in the results section when referring to LBP for more than 30 days during the past year. I recommend that one label only is chosen and systematically used in the results.

Table 2, 3rd column lacks title, and the terms 'LBP-long' and LBP-year' should be explained for instance in a subscript, or written in a self-evident form in the table proper. Why are not 'incident' cases of LBP analysed with regard to 'dose-response' (Table 4)? The last reference (No 29) is incomplete.

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Discretionary Revisions (which the author can choose to ignore)
The bulk of the present manuscript is on the twins treated as a sample of the normal population. The authors now mention that they are going to study further all the twins, discordant for LBP, in a matched case-control design. I wonder, would it not be best to include the present findings on monozygotic twins in that paper, and make their description (e.g. variation in determinants) and analysis more comprehensive there?

**What next?:** Accept after minor essential 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