Reviewer's report

Title: Validity of self-reported height and weight among adolescents: The importance of reporting capability

Version: 3 Date: 23 April 2013

Reviewer: Manfred Stommel

Reviewer's report:

Discretionary Revisions:

(1) In the discussion section (p.12) you write: “While no systematic difference in misclassification of weight by response capability was detected among boys, both among boys and girls the results indicate a larger reporting error (random measurement error) among students with low response capability.” It’s not clear what you mean by “misclassification,” since you report mean differences between self-reported and measured weight in Table 2 and Table 5.

(2) Language improvements:

p.5: We dichotomised weighing history into being weighed ‘within the past month’ (recently) versus ‘more 6 than one month ago’ + ‘don’t remember’ (not recently). Height measuring history was dichotomized into being measured ‘within the past half year’ (recently) versus ‘more than half a year ago’ + ‘don’t remember’ (not recently).

=>We dichotomized weighing history into being weighed ‘within the past month’ (recently) versus the combined ‘more 6 than one month ago’ and ‘don’t remember’ categories (not recently). Height measuring history was dichotomized into being measured ‘within the past half year’ (recently) versus the combined ‘more than half a year ago’ and ‘don’t remember’ categories (not recently).

p.8: Therefore, secondly analyses also adjusted by measured weight and height, respectively, were conducted.

=>Therefore, secondly analyses also adjusted by measured weight and height, respectively, were conducted.

p.8: Generally, marked differences were observed between boys and girls and all analyses were therefore conducted stratified by gender. The modifying effect of gender was also tested by inclusion of an interaction term in the multivariate analyses.

=>Generally, since marked differences were observed between boys and girls, all analyses were therefore conducted separately by gender. The modifying effect of gender was also tested by inclusion of an interaction term in the multivariate analyses.

p.13: Conclusively, among both boys and girls low response capability seems to
be associated with a larger random measurement error while a systematic underestimation of BMI z-score and overweight prevalence due to low response capability was only observed among girls.

=> Among both boys and girls low response capability seems to be consistently associated with a larger random measurement error while a systematic underestimation of BMI z-score and overweight prevalence due to low response capability was only observed among girls.

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

**Quality of written English:** Acceptable

**Statistical review:** Yes, and I have assessed the statistics in my report.

**Declaration of competing interests:**

I declare that I have no competing interests.