Reviewer's report

Title: Socio-economic status and self-rated mental health in adolescents in an affluent community

Version: 1  Date: 8 January 2014

Reviewer: Michael James Green

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Major Compulsory Revisions

1. Parental migratory status and marital status are both described and analysed as indicators of socioeconomic status, which is unusual. Whilst the introduction states that these factors might be related to the mental health of adolescents there is no justification given for consideration of them as indicators of socioeconomic status. Admittedly, they might both be related to socioeconomic status and could therefore be considered very rough proxies for this concept, but there is no need to use such rough proxy measures when the study has the more detailed and appropriate measures used in the family affluence scale. If anything these factors would be more appropriately considered as potential confounders of the associations found for the family affluence scale, as they could potentially influence both ses and mental health. Analysis of them alone in separate models seems like a separate research question which does not fit well within this paper about the relationship between ses and mental health in adolescence. The treatment of these factors in the discussion section also seems more focused on the non-ses aspects of these factors, rather than interpreting them as indicators of ses.

2. It is stated that only schools with more than 100 pupils were selected in order to avoid potential identification of pupils, but it would be helpful to mention this early on in the section on subjects and data collection. More importantly, it is unclear what aspects of the schools' location in Halmstad were used to select the schools (eg their proximity to what?) or what implications these selection criteria might have for the generalisability of the sample.

3. It is not clear whether the question on parental divorce refers to the respondents birth parents or current parental figures, which could be an important distinction. In any case it does not necessarily inform about the current family structure, which might be particularly important if this is to be considered an indicator of socioeconomic status (two parent households tending to have more resources than single-parent households).

4. The discussion makes no effort to explain one of the most interesting findings of the paper, i.e. that it is the least affluent boys in the older age group who have the worst mental health, but those with a medium level of affluence who have the worst scores in the younger age group.

5. The discussion could also make more of the item-level findings for girls. The
direction of association for the two items that were related to girls’ mental health were in opposing directions and could therefore have cancelled each other out when the FAS scores were combined.

6. The paper could really benefit from considered Partick West’s ideas about relative equality of health by ses in adolescence (e.g. see West et al 1990 Social class and health in youth: findings from the West of Scotland Twenty-07 study. Social Science & Medicine, 30, 665-673).

Minor Essential Revisions:

1. The language in the paper frequently goes back and forth between mental health and simply saying ‘health’ which could also include physical health. Since mental health is the focus of the paper it would be better to be more specific and just say mental health in each instance. If comments were intended to be about both physical and mental health then it is hard to see how these remain relevant to the paper.

2. In the section on subjects and data collection, it is not clear when data collection took place. Some figures for the area are given for 2011 but it does not say that this is when data collection happened.

3. There is a typo here “all eligible classes with students 11-3 and 14-16” and it is unclear that the numbers in this sentence refer to the ages of the pupils.

4. The last paragraph of the section on subjects and data collection refers to pupils in the 9th grade and 6th grade. Do these correspond to the older and younger age groups spoken of in the rest of the paper? If so it would be helpful to make the link explicit (better still to just be consistent in talking about younger and older groups).

5. In the section on the family affluence scale it is unclear what the (0,1,2) refers to after the question on whether the family owns a vehicle, nor the (0,1) after the question on room-sharing.

6. Does the question on computers owned by the family include things like tablets, smart-phones etc?

7. It could be clearer that the logistic regression models are predicting the odds of being below rather than above the mean on the MMQL. It could also be clearer that lower scores on the MMQL represent worse mental health than higher scores.

8. There is a typo in the foot-note to Table 1. I believe it should be ‘Gender differences’. Also the p* does not appear within the Table so it is unclear what this footnote refers to.

9. There are a couple of misplaced or missing words in this sentence: “Boys in the younger age group were likely to significantly rate their mental health below mean when having FAS score 7”

10. Table 2 is not mentioned anywhere in the text so it is not clear when a reader should refer to it.

11. “The study was based upon self-reported data, which might be a strength”
This is a bit vague, is it or isn’t it a strength?

Discretionary Revisions:

1. The paragraph discussing subjective social status seems a bit tangential to the rest of the paper and the point could be summarised a good deal more concisely.
2. The summary paragraph at the beginning of the discussion seems to neglect to say anything about parent’s migratory status.
3. The analysis of FAS where most points on the scale are included as separate categories does not seem to add much beyond the simpler low/medium/high categorisation. Could you just say that you tried this and results were similar?
4. In Table 2 “numbers of SES variables” is not a very helpful label, “FAS score” would be better (though I would advise taking this out anyway as superfluous). However, for the FAS score category labels it might be helpful to provide the score ranges in parentheses next to the labels high, medium and low.

Level of interest: An article of limited interest

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

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