**Reviewer’s report**

**Title:** Associations between the structural and functional aspects of social relations and poor mental health. A cross-sectional register study

**Version:** 0  **Date:** 04 Jul 2017

**Reviewer:** Christian Hakulinen

**Reviewer's report:**

Present study examines the association between social relations with mental health using large cross-sectional study. Manuscripts is well written, appropriated analytical methods have been used and data is well-suited to examine this research question.

I have some concerns and suggestions, which I have outlined as follows:

1) **Abstract:** Participants mean age (and also SD and range) should be reported under methods.

2) **Background:** Reference from this statement "Men and women have different needs for emotional and instrumental support" is missing

3) **Results:** Although authors provide good reasons why they have used dichotomized measure of mental health, I think that it would be interesting for the readers also to see whether results are similar using continuous measure of mental health. This could be reported in the sensitivity analyses.

4) **Covariates:** What was the rationale for three age groups? Why was age not used as a continuous measure? The interaction analyses with continuous age should also be reported.

5) **Discussion:** What is the potential role of reverse causality, i.e., poor mental health causing loss of social connections, in the current study?

6) **References** were missing from the manuscript version that I received. Thus, I assume that the authors cite also the most recently published papers on the topic.
Are the methods appropriate and well described?
If not, please specify what is required in your comments to the authors.

Yes

Does the work include the necessary controls?
If not, please specify which controls are required in your comments to the authors.

Yes

Are the conclusions drawn adequately supported by the data shown?
If not, please explain in your comments to the authors.

Yes

Are you able to assess any statistics in the manuscript or would you recommend an additional statistical review?
If an additional statistical review is recommended, please specify what aspects require further assessment in your comments to the editors.

I am able to assess the statistics

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Please indicate the quality of language in the manuscript:

Acceptable

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