Reviewer’s report

Title: Productive activities, mental health and quality of life in disability: Exploring the role enhancement and the role strain hypotheses

Version: 1  Date: 07 Aug 2018

Reviewer: Katja Kokko

Reviewer’s report:

Reviewer’s comments on the revised manuscript titled "Productive activities, mental health and quality of life in disability: Exploring the role enhancement and the role strain hypotheses"

I thank you the authors for the revised version of the manuscript in question. They have been quite responsive to my previous comments. In only have a couple of remaining points.

First, since the results and discussion are now for the first time available to the reviewers, I can see that the role of gender in the association between productive activities and mental health/quality of life is both taken into consideration in all the analyses and then discussed. I would suggest that some hypothesis for its expected role was presented in the context of the research aims (p. 5). To lay ground for the hypothesis, it might be helpful to add information to the previous chapter (p. 5). Now, the chapter implies that there are gender differences (e.g., "…engagement in productive activities varies substantially by gender…") but the exact differences are not described.

Second, if I understand it correctly, the present participants were over 16 years. Further, in order to be included in the present sample the participant had to be in an employable age, the maximum of which was < 64 years for women and < 65 years for men. I have two questions: first, is the minimum age for a person to be employed 16 years in Switzerland and, second, is there any reason to expect differences in the productive activities as such and their links to mental health/quality of life to differ between a 16-year-old and a 65-year-old person? I previously had a comment on the possible moderator role of age but the authors presented well-grounded arguments against this suggestion. But I am still wondering if the role of age could at least briefly be speculated in the discussion (on, e.g., p. 13).

Third, on p. 6, the formation of the load of engagement variable is described. The load of four activities (paid work, volunteering, education, and housework) was assessed on the basis of hours per week (from 0 to > 35 hours). Then, a total score for productivity was calculated, with a score ranging from 0-100 hours. I have to say that I got a bit confused with the score range, particularly, the score maximum. Is it an observed maximum score?

Finally, regarding Figure 1, I am wondering if the terms "mental functioning" and "well-being" should be adjusted to the terminology of the present manuscript.

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?**
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Yes

**Are you able to assess any statistics in the manuscript or would you recommend an additional statistical review?**
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I am able to assess the statistics

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