Reviewer's report

Title: The role of paternal psychosocial work condition on mental health of their children: A case-control study

Version: 1 Date: 3 April 2007

Reviewer: Johannes Siegrist

Reviewer's report:

General
This study explores associations of paternal working conditions with their children's onset of a variety of mental disorders in a life-course perspective, using expert ratings of workplaces and administrative data based on ICD 9-diagnoses. The large cohort of sawmill workers and of their children, the careful study design, the variety of diagnoses under study, and the statistical analyses conducted that include additional independent variables contribute to the strengths of this study. As a main finding, authors demonstrate some effects of psychosocial work stress, as measured by components of the demand-control model, on children's risk of mental disorder, depending on type of diagnosis and age at onset.

Major Compulsory Revisions (that the author must respond to before a decision on publication can be reached)
1. The Introduction exclusively addresses work-related factors, but the Results and Discussion sections are additionally concerned with ethnicity, marital status, parental health etc. Authors should justify the additional selection of these variables in terms of content, i.e. their significance for children's health, in the Introduction, rather than mentioning them by the way on p. 7.
2. A general problem concerns the way results of the study are presented in Tables 2 to 4 as well as their interpretation. For instance, in Table 2 one would expect a total of 100 regressions if each one of the 5 work stress categories was tested for each type of diagnosis (5) in each age category (4). Actually, 5 out of 100 estimates are statistically significant, without considering the issue of multiple testing. Thus, authors should be more careful in interpreting the robustness of their findings.

Minor Essential Revisions (such as missing labels on figures, or the wrong use of a term, which the author can be trusted to correct)
1. On p.4, authors discuss the role of father's work experience in children's mental development, without referring to the classical studies of Melvin Kohn who demonstrated strong effects of work complexity and autonomy on children's mental states.
2. On p.6, components of the demand-control model rather than the model itself (interaction term, quadrants etc.) are introduced. Authors might explain why the model as such was not tested.
3. On p.8f. it is pointed out that each individual is classified once per age category. Given substantial co-morbidity and chronicity in mental health, it may be that a substantial number of children appear twice or more in the analyses. The possible bias of this fact should be stressed by authors.
4. On p. 13f, authors discuss some findings as if they were derived from a true longitudinal investigation ("differential impact on each developmental age group"; "play a more important role from adolescence through adulthood").
5. In discussing limitations, the many null findings are not mentioned.
6. The conclusions both in the Abstract and text are overstated, given the above mentioned problems.

Discretionary Revisions (which the author can choose to ignore)
1. The title sounds somehow strange (The role...on...).
2. In the Abstract and on p. 14, age 16 is emphasized, but the cut between age groups is 14.
3. p.8, line 12: should be: "health outcomes of the...."
4. p.13, line 11: should be: "health in that it suggests"
Figure 1: Authors should mention that probabilities of being diagnosed are not identical across the different age groups (see p. 8f).

What next?: Unable to decide on acceptance or rejection until the authors have responded to the major compulsory revisions
Level of interest: An article of importance in its field

Quality of written English: Acceptable

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.