Reviewer's report

Title: The impact of gender and parenthood on physicians' careers - professional and personal situation seven years after graduation

Version: 2 Date: 7 October 2009

Reviewer: Phil J.M. Heiligers

Reviewer's report:

A. Major Compulsory revisions
General remarks

1. This study presents a large number of interesting variables which could lead to subtle insights on the impact of gender and parenthood on the career of doctors. It is nevertheless disappointing that the findings are limited by the type of analyses: a large number of separate comparisons between female and male physicians (with and without children) regarding the presented variables.

The article would be more informative if analyses would focus on the relation between individual characteristics (in Table 5) and outcome variables, such as life satisfaction, career satisfaction, work-life balance.

Then we might find out whether e.g. especially female doctors with children, a part-time job and working in a regional hospital or as a general practitioner would find the highest life satisfaction in family life. Or that, in particular the fulltime male surgeon without children, working in a university hospital finds the highest life satisfaction in his work.

The performance of a large number of individual tests for comparisons on gender and parenthood leads to limited stereotyped images. Hardly any new insights are mentioned.

I recommend performing logistical regressions on this dataset in order to create a more interesting article.

2. Linked to the previous remark is that theoretical justification is helpful in stating hypotheses. Hypotheses (or research questions) would structure the article in relevant topics. Concepts such as satisfaction and work-life balance create the possibility to make use of previous studies and instruments used. Remarkable is the use of 4 work-life balance concepts, which are used as items, whereas validated scales exist. I wonder whether the respondents in this study are familiar with the differences between the 4 concepts.

Further comments refer to several parts of the article:

3. Method
a. A number of used instruments are not clearly described:

career aspiration is a list of physician functions, which presumably refers to an
hierarchical relationship, but we find no explanation, mentoring experience scale has been created by combining two subscales, which are highly correlated. Consequently, this leads to a very high reliability of the new scale. I think this exercise is not very useful, because the two subscales approximately measure the same, work-life balance is measured by using existing concepts as items. This seems to me a restriction of the options, which are offered by existing scales,

b. The use of multivariate and univariate analyses is hardly explained which raises questions about the data presentation in the tables (see below). As mentioned before I strongly advise the use of (logistic) regressions, which are enriching for the article.

4. Results
a. The result-section is filled with a lot of separate parts on career-related topics, but lacking a coherent structure. The relation between descriptions of results and tables is not clear, because for each variable we have to combine analyses of variance and the means given in separate tables above.
b. The presentation of analyses of variance in table 2-4 is not clear. Firstly, the independent variable of the multivariate analyses is not mentioned. Secondly, it is not clear to which the figures given between brackets (after the F) are referring to. Finally, I am wondering how an interaction-effect (gender X children) in a univariate analysis was performed.

5. Discussion
As mentioned above, the discussion could have been more interesting if relations between individual characteristics and outcome measures had been analyzed. We still do not know what specific groups of men and women will need more support in terms of mentoring, or what kind of doctors in which type of functions or workplaces are less satisfied with their work.

I strongly recommend the authors to choose a theoretical background and perform adequate further analyses in order to revise the article.

B. Minor essential revisions
- some terms should be revised, e.g. female doctors instead of women doctors,
- in the presentation of tables some columns are missing, e.g. the totals of men and women,
- the presentation of Chi-squares in table 5 is unusual and not clear (lacking the totals).

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

Quality of written English: Needs some language corrections before being published
**Statistical review**: Yes, and I have assessed the statistics in my report.

**Declaration of competing interests:**

I declare that I have no competing interests