Reviewer's report

Title: Assessing the validity of the Global Activity Limitation Indicator in fourteen European countries

Version: 1
Date: 16 June 2014
Reviewer: viola angelini

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Major compulsory revisions

1. One major concern is that the authors validate the Global Activity Limitation Indicator (GALI) using measures which are also self-reported and, therefore, essentially subjective. The authors write that “none of these instruments is a gold standard for the GALI, but positive associations with the GALI are expected”. However, the positive association found in the data might be completely driven by differences in reporting styles. If a person has a tendency to rate his or her difficulties as less severe than another, he or she will score higher in all the disability measures, leading to a positive association. I believe the authors should discuss this issue.

2. The authors use measures of ADL, IADL and functional limitations on their original scale when fitting the model on the European population as a whole, while they use their dichotomized version when analysing each country separately. The motivation behind this choice should be clarified in the text.

3. The observed cross-country differences in GALI, ADL, IADL, functional limitations and their association are striking. For example, the percentage of people with limitations as measured by GALI is 43.6% in Latvia but 24.6% in Poland. The authors mention that this might be due to a lack of harmonization of the EHIS and the different sample compositions. In the analysis, they correct for gender and age but, according to the descriptive statistics, these are quite homogeneous across countries. In this context, it would be interesting to investigate the role of education and occupational status (the information is available in the survey). Education and occupational status are important because these are likely to reflect differences in the “activities people usually do” to which the GALI question refers.

Minor essential revisions

1. In the introduction, the authors should highlight why their research question is important.

2. In the data section, the authors mention that participation to the survey was compulsory in France, Spain and Greece. However, according to Table 1, the response rate in Spain was only 74%. What does compulsory participation mean then?
3. In the discussion of the results, the authors state that they have carried out additional analysis using different subset of countries, for example excluding Belgium, France, Romania and Slovakia. However, to me it is not clear why it would be interesting to exclude these four countries. I am more concerned about the fact that France, Poland, Romania and Spain have very large sample sizes and that these countries might be driving the aggregate results.

**Level of interest:** An article of importance in its field

**Quality of written English:** Acceptable

**Statistical review:** Yes, and I have assessed the statistics in my report.

**Declaration of competing interests:**

I declare that I have no competing interests.