

Introduction to exercise: Evaluation of the NDI questionnaire

This exercise is meant to exemplify the process of evaluating measurement properties of a questionnaire here the NDI. Since such an evaluation is a massive amount of work some liberties and adjustments have been taken in order for you to get through all the important steps.

One liberty is the amount and type of studies: the number of studies is limited to six, and those six studies are all translation of the NDI from English to another language, thereby similar in aim and composition. The article you have already worked with in journal club is included among the six.

Since there isn't time for you to actually read all six studies or even just one extra study meticulously, focus is on the measurement property *internal consistency*, as it is easier to handle in isolation.

A simplified version of the cosmin review management file (excel) is used, but the complete file as well as Risk of bias checklist for assessing quality of studies version 3, and Criteria for good measurement properties files are given below:

<https://www.cosmin.nl/tools/guideline-conducting-systematic-review-outcome-measures/?portfolioCats=19>

The intention is for you to get an impression of the process, especially the later steps. Some articles with examples of evaluation are provided to further illustrate the process. Please continue working in the same groups as for journal club.

1. Extract data on included samples: Each group fill in the sheet "Study population" in "tables exercise" for their appointed study.
2. Assess the methodological quality of the studies: Each group fill in sheet "RoB assessment" in "tables exercise" for their appointed study.
3. Extract data and evaluate results against criteria of good measurement properties: Each group extract data and insert the results in sheet "Result measurement" and evaluate against criteria for internal consistency. Here you assume that the criteria "At least low quality evidence for sufficient unidimensionality" is fulfilled. We will come back to this later.
4. Summarize evidence: Use the approach summarizing and insert your results in sheet "summary".
5. Rate the summarized results against criteria of good measurement properties. Again assume that the criteria "At least low quality evidence for sufficient unidimensionality" is fulfilled
6. Grade the quality of evidence: Each group apply the four factors to the summary result for the NDI.