

S. EIVAZZADEH, P. ANDERBERG, T.C. LARSSON, J. BERGLUND., **Quantifying the accuracy of a systematic literature review: The case of a gerontology review.** *Gerontechnology* 2016;15(suppl):13s; doi:10.4017/igt.2016.15.s.001.00 **Purpose** Over 70 studies can be found in the PubMed research database that are literature reviews on gerontology topics. While these studies have utilized almost similar approaches for their systematic literature review process, following similar protocols such as PRISMA¹, but they do not necessarily reflect the same accuracy and effectiveness in finding the relevant studies. The two notable factors affecting this accuracy and effectiveness are the initial keyword sets, which are usually selected subjectively by the researchers' opinion, and the number of snowballing rounds that take place. Being able to assigning accuracy, sensitivity, and specificity to a systematic literature review process, will help to understand how well it succeeded in finding its target literature or compare two literature reviews on the same topic. **Method** Definitions of accuracy, sensitivity, and specificity were mapped to the number of search and filtering results in different steps of a typical systematic literature review. For a group of systematic literature reviews, the number of results in their different steps were examined with this new definition. **Results & Discussion** We suggest to make an analogy between the systematic literature review process and the concept of diagnosis to reincarnate accuracy, sensitivity, specificity, and other related quantitative parameters the field of systematic literature review (*Figure 1*). A method is proposed for calculating these parameters based on the number of results in each step of a typical literature review. The field of gerontology, regarding the number of literature reviews in this field, can be a good candidate for testing our proposed method.

References

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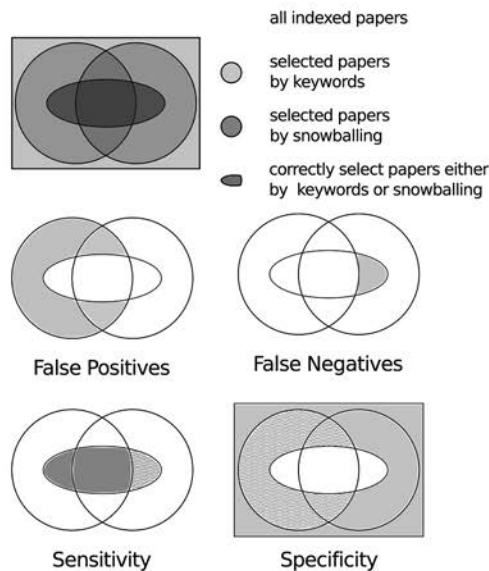


Figure 1. Mapping sensitivity and specificity concepts into systematic literature review process (with only one round of snowballing)