**Suggested data extraction technique for the scoping review, WP1: The difference method**

1. To be able to extract the data, the study needs to contain analyses of gender differences in functional health, with and without adjustments for socioeconomic conditions.
2. If this requirement is fulfilled, we can use the difference method to assess how much (%) of the observed gender differences in health that can be attributed to gendered differences in (the measured) socioeconomic conditions: The formula for the difference method reads as follows:

100\*(βunadjusted model – βadjusted model)/ βunadjusted model

1. For example, if we look at the estimates for *ADLs: Dressing* for the US in Table 7 of the Wheaton and Crimmins paper – we can see that the odds of having difficulties performing the task is 58% higher for women (OR: 1.58) in the unadjusted model, and 41% higher in the adjusted model (OR: 1.41). If we plug these values into the difference formula, we get this:

100\*(log(1.58)-log(1.41))/log(1.58) = 24.9

That is 24.9% of the observed gender differences in difficulties in getting dressed could be attributed to gendered differences in education and marital status.

1. The strength of this method is that it allows us to quantitatively extract data from studies that were not explicitly designed to answer our research question. Yet, as all methods, this methods also comes with a series of limitations:
2. Due to the underlying statistical model of generalized linear models (HRs, ORs, etc), the estimates are likely to come out on the conservative side.
3. The method only works for studies where they present both non-adjusted and adjusted estimates. It cannot be used for studies that only present adjusted estimates.
4. Often, the adjusted model also include adjustments for other, not directly socioeconomic, indicators. In the Wheaton and Crimmins paper, for example, the adjusted model includes both education and marital status. My suggestion would be to include studies where the adjustment “bundle” include other ‘social’ variables (such as marital status) but not other types of indicators (e.g., health, behaviours, etc.). Hopefully, there will be enough variation in the “bundled” variables so that we can point to patterns anyway.
5. This is the one method that I can think of, to quantitatively extract data. Another option would be to do some kind of qualitative assessment of the estimates. This would allow us to also include studies that only gives the adjusted estimates (and tell whether any gender differences are observed in these models). However, personally I find this to be a weaker identification strategy.