

Health Science Statistics using R and R Commander by Robin Beaumont

Chapter 33 Meta-analysis: The basics

Learning Outcomes

*** = more advanced outcomes**

Learning outcome	Tick box
Be able to describe the basic aim of meta-analysis	q
Be able to describe and interpret a forest plot	q
Be able explain the difference between a fixed and random effect in meta-analysis	q
Be able to describe and provide an example of heterogeneity	q
Be able to list the common measures used to measure heterogeneity in meta-analysis	q
Be aware that a dataset needs to be in a specific layout for it to be suitable for meta-analysis using the <i>rma()</i> function in the metafor package	q
Be aware that there are many different outcome measures, providing a couple of examples	q
Be able to describe publication bias and discuss its assessment using the funnel plot	q
Be able to describe how heterogeneity is accounted for in meta-analysis	q
Be able to write up a set of results in the appropriate style	q
*Using an appropriate dataset create R code demonstrating the <i>rma()</i> function in the metafor package	q
*Using an appropriate dataset create R code to demonstrate how heterogeneity is accounted for in meta-analysis	q
*Using an appropriate dataset create R code to demonstrate residual analysis of a meta-analysis	q
*Create R code to demonstrate several enhancements of the forest plot	q