

## Interpreting Results

Levels of Evidence (see Wikipedia entry)

Meta-analyses of RCTs > Systematic reviews or RCTs without meta-analyses > Qualitative opinion reviews of RCTs > a few RCTs > Meta-analyses of non-randomized studies (cohort/case control/noncontrolled RCTs) > Systematic reviews of nonrandomized studies > Expert opinion

Causality

See Hill's criteria for evaluating non-RCT studies

Interpreting Individual Results

What are necessary controls or comparison groups

Are there alternate explanations, esp simpler ones

Compare results with expected base rates or control group outcomes

Does it fit with prior research

Is it actually a replication test

Is magnitude sufficient for policy, public health, clinical changes

Is convergent validity present

What is distribution of effect across people – is effect due to a small subgroup?

Generalizability of sample

What is biggest anomaly in data