Metanalysis

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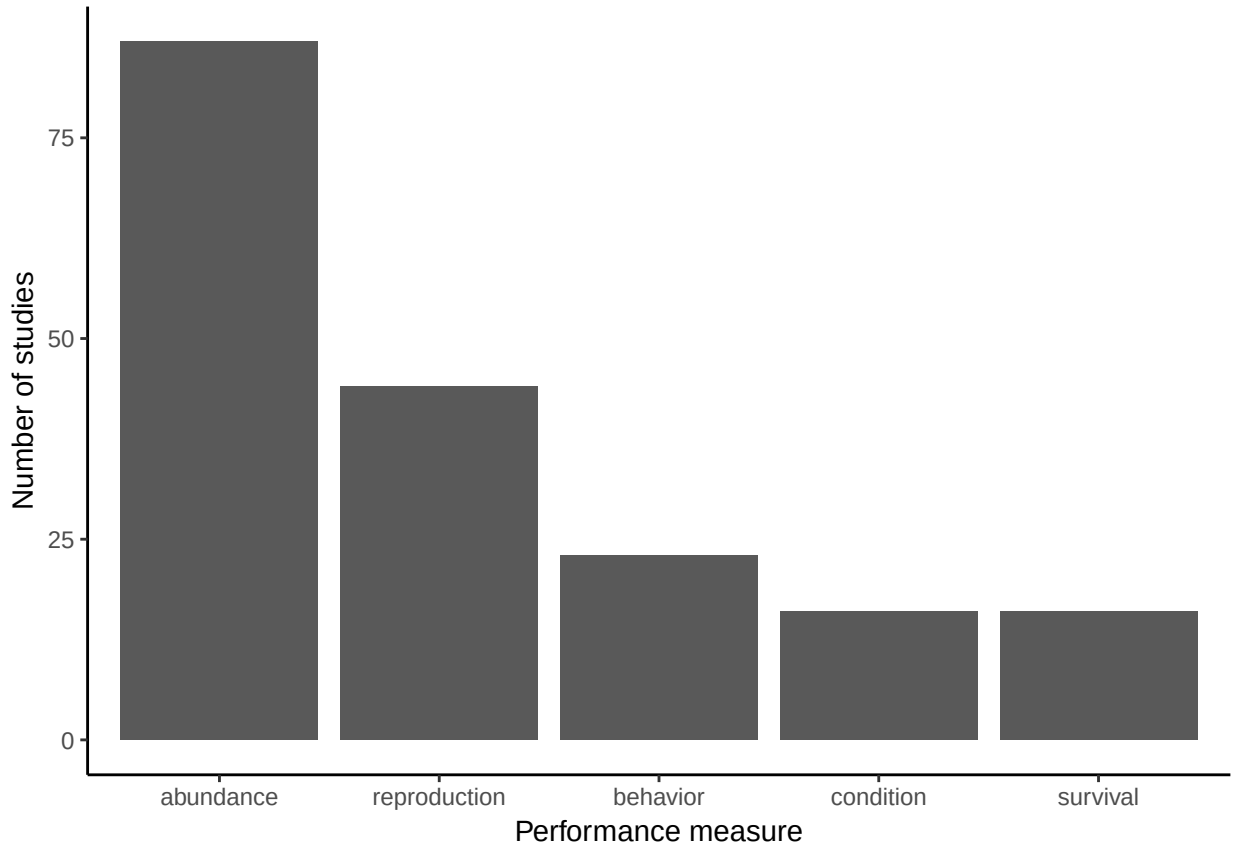
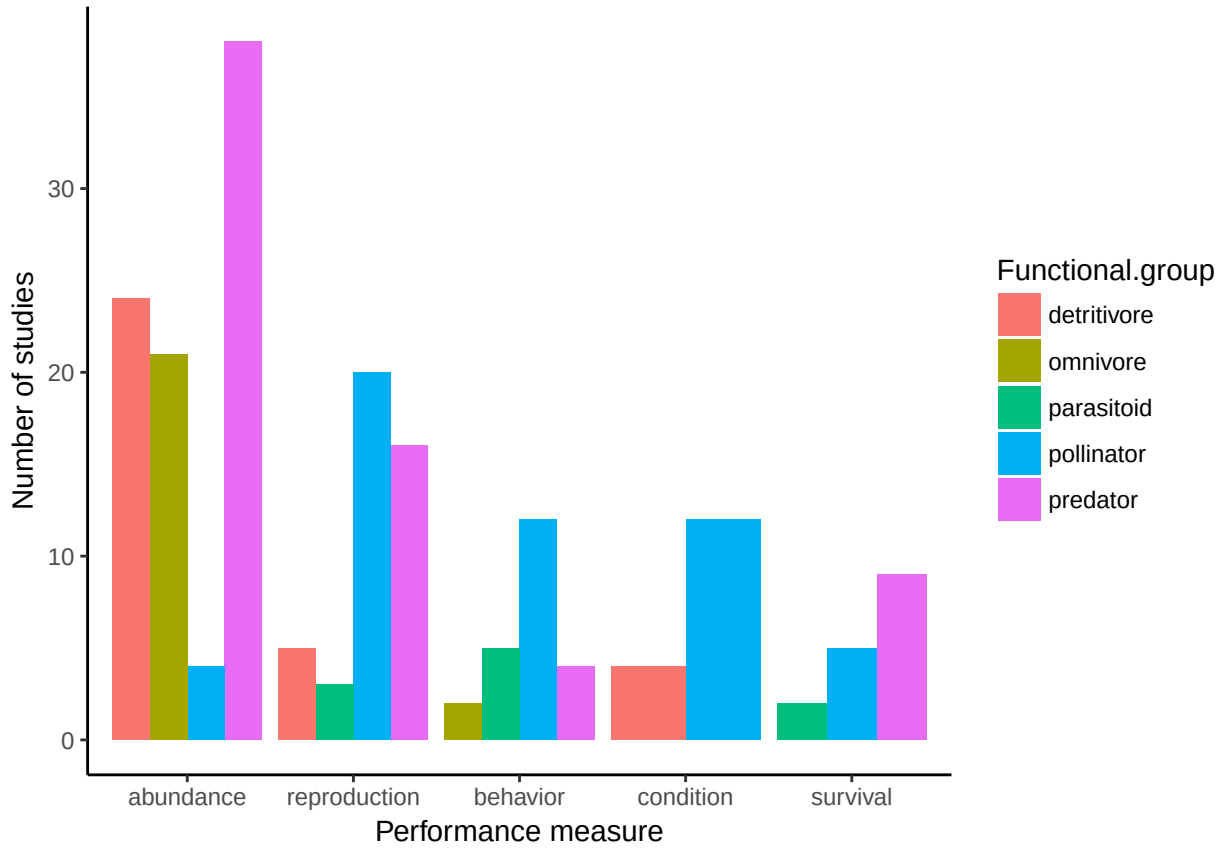
summary stats

Studies per fitness measure

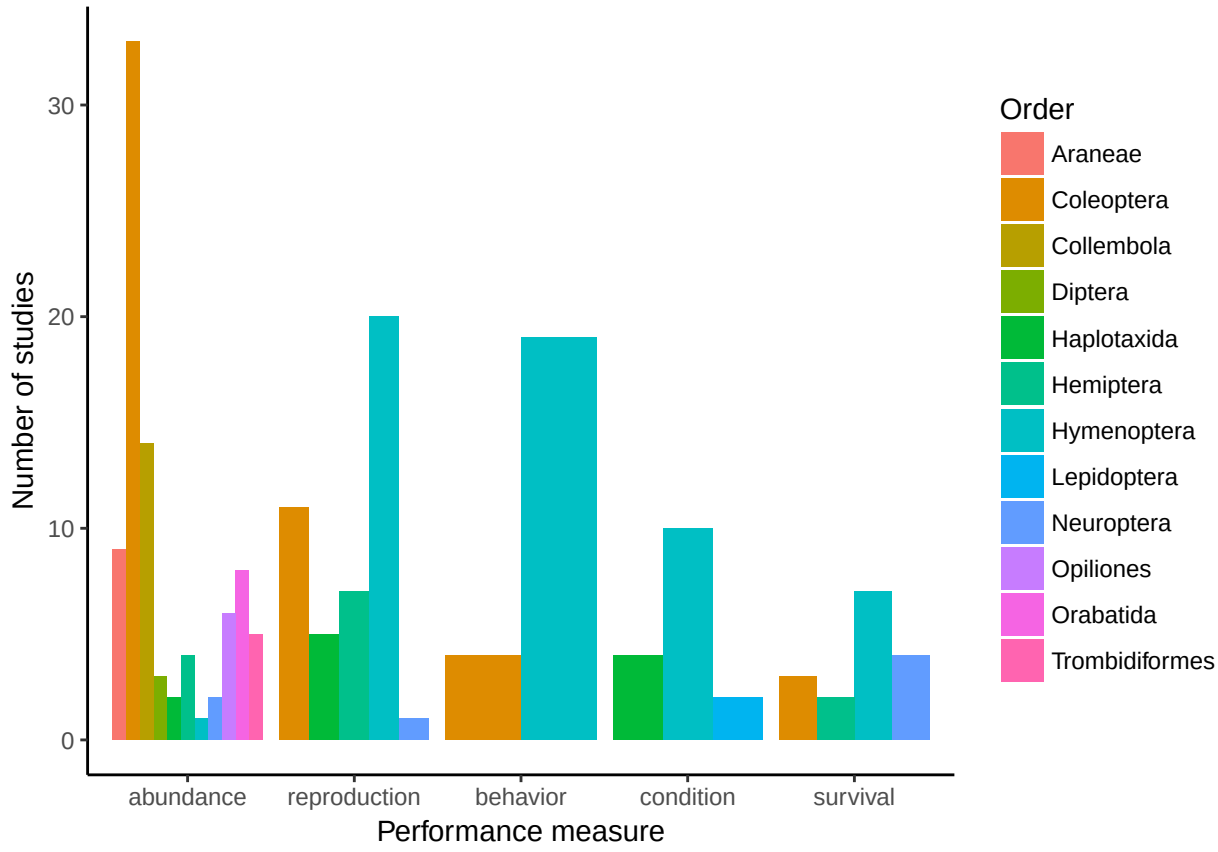


Categories present by Fitness measure

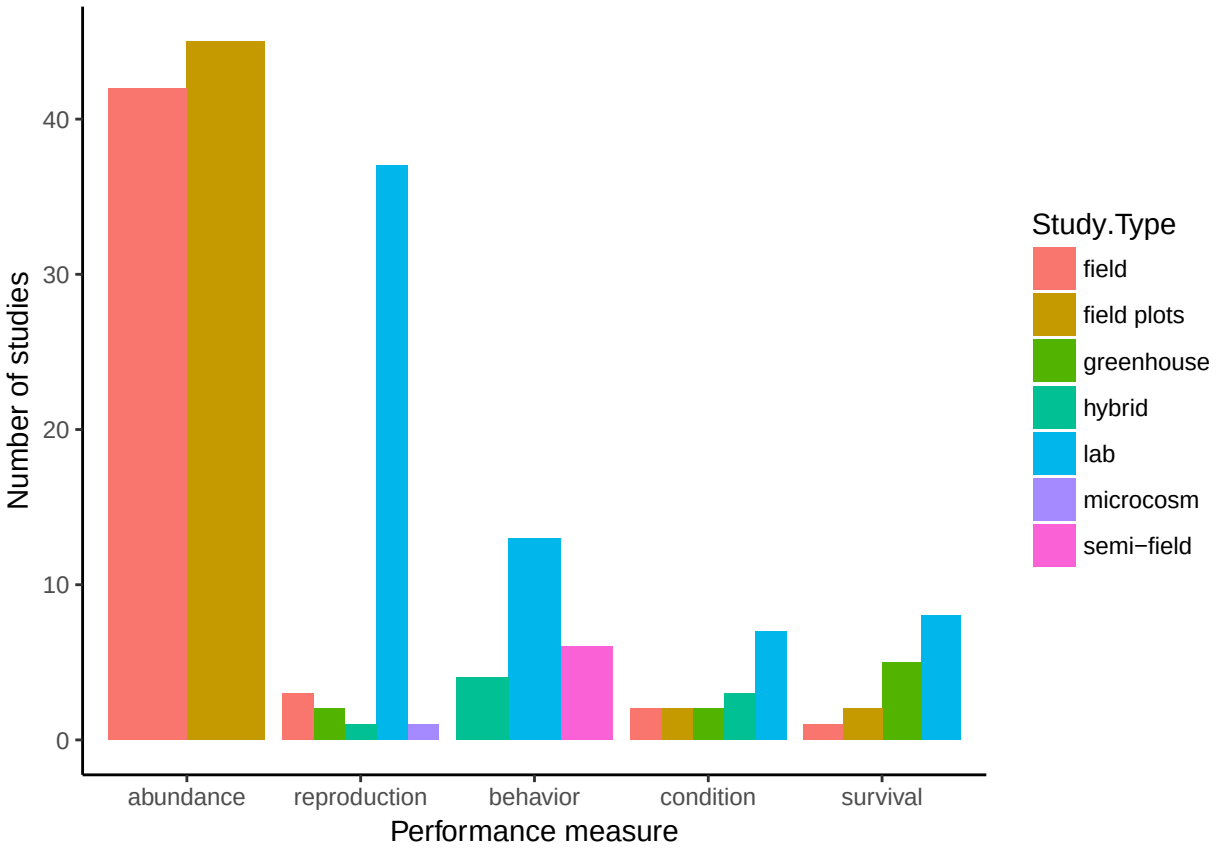
Functional group



Taxonimical Order


Number of studies
30
20
10
0
abundance
reproduction
behavior
condition
survival
Performance measure
Order
Araneae
Coleoptera
Collembola
Diptera
Haplotaxida
Hemiptera
Hymenoptera
Lepidoptera
Neuroptera
Opiliones
Orabatida
Trombidiformes

Study type



Use of Hedge's g for testing differences

Interpreting Results

A g of 1 indicates the two groups differ by 1 standard deviation, a g of 2 indicates they differ by 2 standard deviations, and so on. Standard deviations are equivalent to z-scores (1 standard deviation = 1 z-score). Rule of Thumb Interpretation

Cohen's d and Hedges' g are interpreted in a similar way. Cohen suggested using the following rule of thumb for interpreting results:

- Small effect (cannot be discerned by the naked eye) = 0.2
- Medium Effect = 0.5
- Large Effect (can be seen by the naked eye) = 0.8

Heterogeneity

Tau Square

- An estimate of the between-study variance in a random-effects meta-analysis is given as (known as tau-squared).
- If > 1, suggests presence of substantial statistical heterogeneity.

I Squared

Thresholds for the interpretation of I2 can be misleading, since the importance of inconsistency depends on several factors. A rough guide to interpretation is as follows:

– 0% to 40%: might not be important;

– 30% to 60%: may represent moderate heterogeneity;

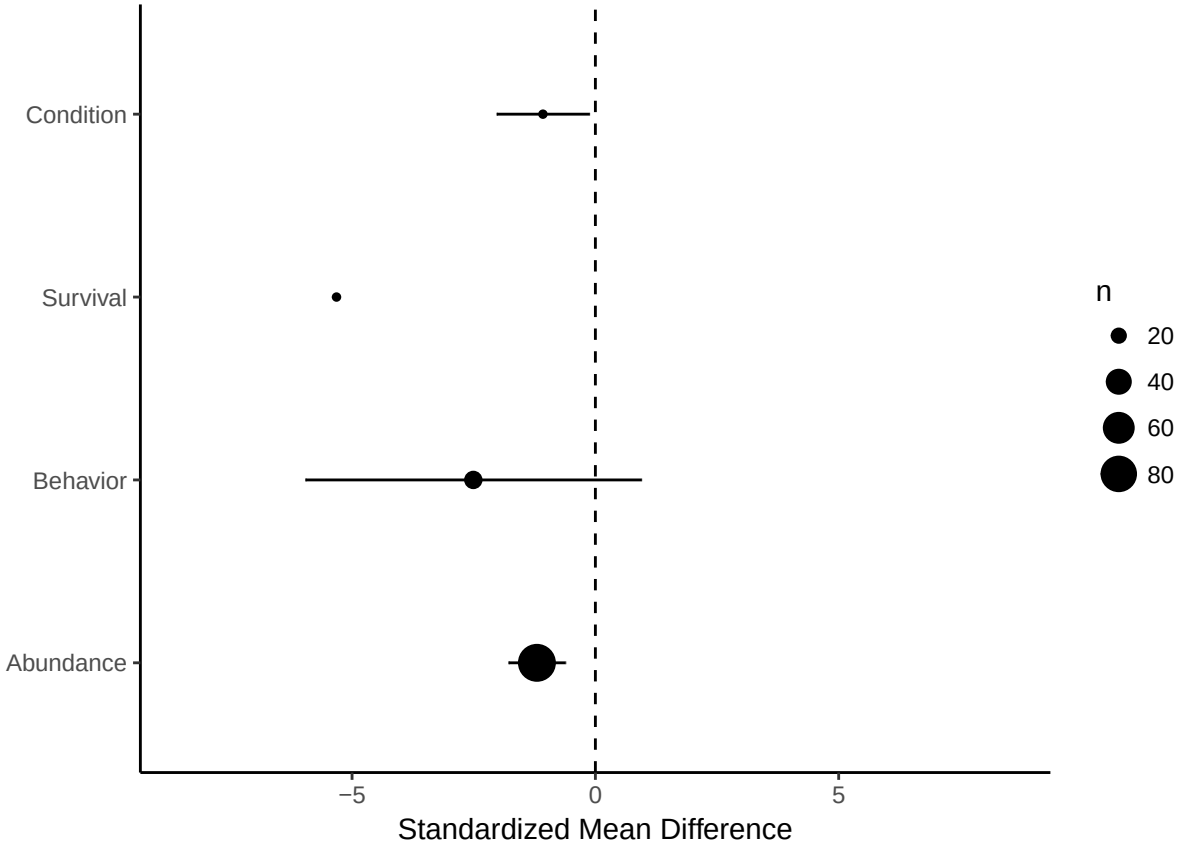
– 50% to 90%: may represent substantial heterogeneity;

– 75% to 100%: considerable heterogeneity*.

If there is evidence of statistical heterogeneity, we should proceed cautiously, investigate the reasons for its presence and modify our approach accordingly, perhaps by dividing the studies into subgroups of those with similar characteristics.

Fitness measure

estimate	ci.ub	ci.lb	group	p	n
-1.201	-0.619	-1.783	Abundance	0.000	87
-2.508	0.940	-5.957	Behavior	0.154	23
-5.319	-1.556	-9.083	Survival	0.006	16
-3.366	13.710	-20.441	Reproduction	0.699	44
-1.078	-0.128	-2.027	Condition	0.026	16



Abundance

estimate	ci.ub	ci.lb	group	p	n
-1.201	-0.619	-1.783	Null	0.000	87
-0.469	0.574	-1.513	detritivore	0.378	24
-2.838	-1.657	-4.019	omnivore	0.000	21
-1.662	0.747	-4.070	pollinator	0.176	4
-0.780	0.036	-1.596	predator	0.061	38