

Weight of Statistical Evidence

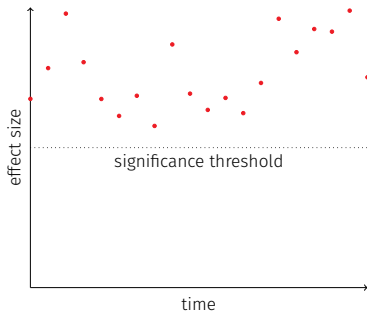
Detection and Correction of Publication Bias

Servan Grüniger

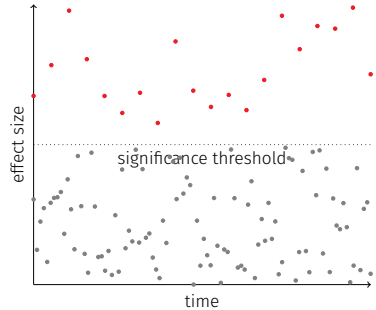
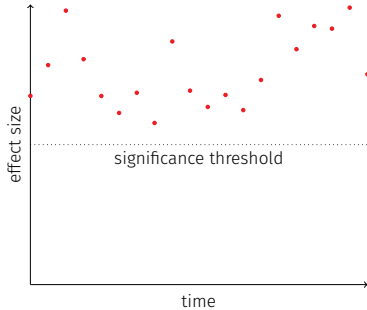
Zurich, November 29th 2019

EBPhD Admission Interview

Publication bias—why care?



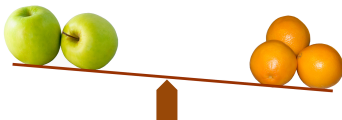
Publication bias—why care?



Three goals

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1. Make evidence comparable



Three goals

1. Make evidence comparable
2. Detect publication bias



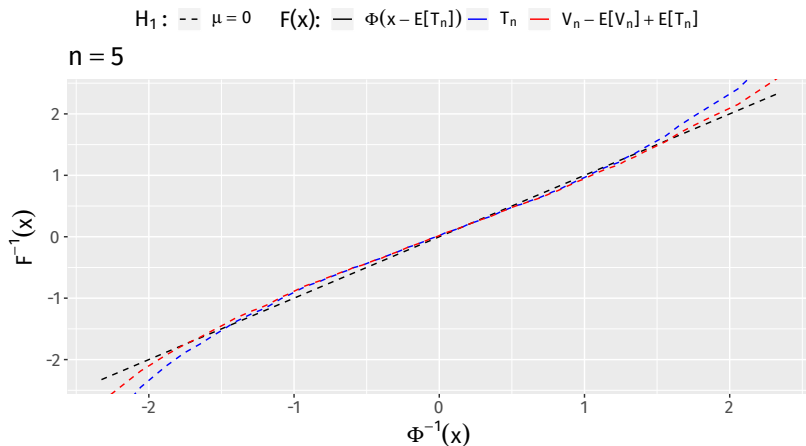
Three goals

1. Make evidence comparable
2. Detect publication bias
3. Correct publication bias



Goal 1: Make evidence comparable

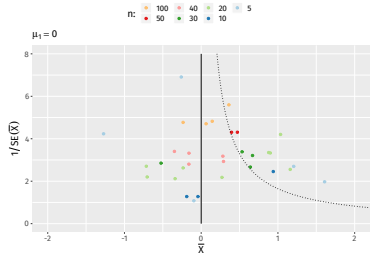
Goal 1: Make evidence comparable



Goal 2: Methods to detect publication bias

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- The funnel plot



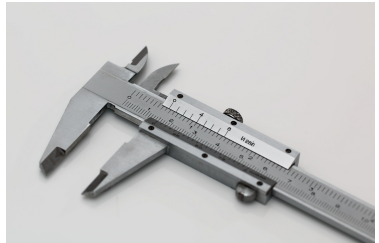
Goal 2: Methods to detect publication bias

- The funnel plot
- File drawer calculation



Goal 2: Methods to detect publication bias

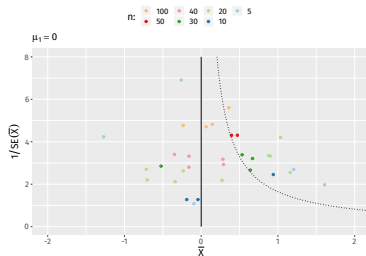
- The funnel plot
- File drawer calculation
- The calliper test



Goal 3: Methods to correct publication bias

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- Trim-and-fill



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- Trim-and-fill
- Reweight by publication probability



Goal 3: Methods to correct publication bias

- Trim-and-fill
- Reweight by publication probability
- Maximise truncated likelihood

