

Re: Small Sample Size and Validity

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nicgushar@xxxxxxxx wrote:

How does reducing sample size effect validity?

(I take it that you meant "affect" ?)

I can't explain mathematically but I can explain more logically.

Each member of a sample contributes something to the validity of a result. Furthermore, there is a probability that each member of the sample is wrong, which is more or less independent of the number of samples (it might be dependent on the distribution of samples, however). Given those two pieces of estimates, for small sample sizes the probability that the sample is wrong begins dominate its contribution to the validity.

An easier way to put it is that the smaller the sample size, the more correlated the data needs to be to be valid.

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