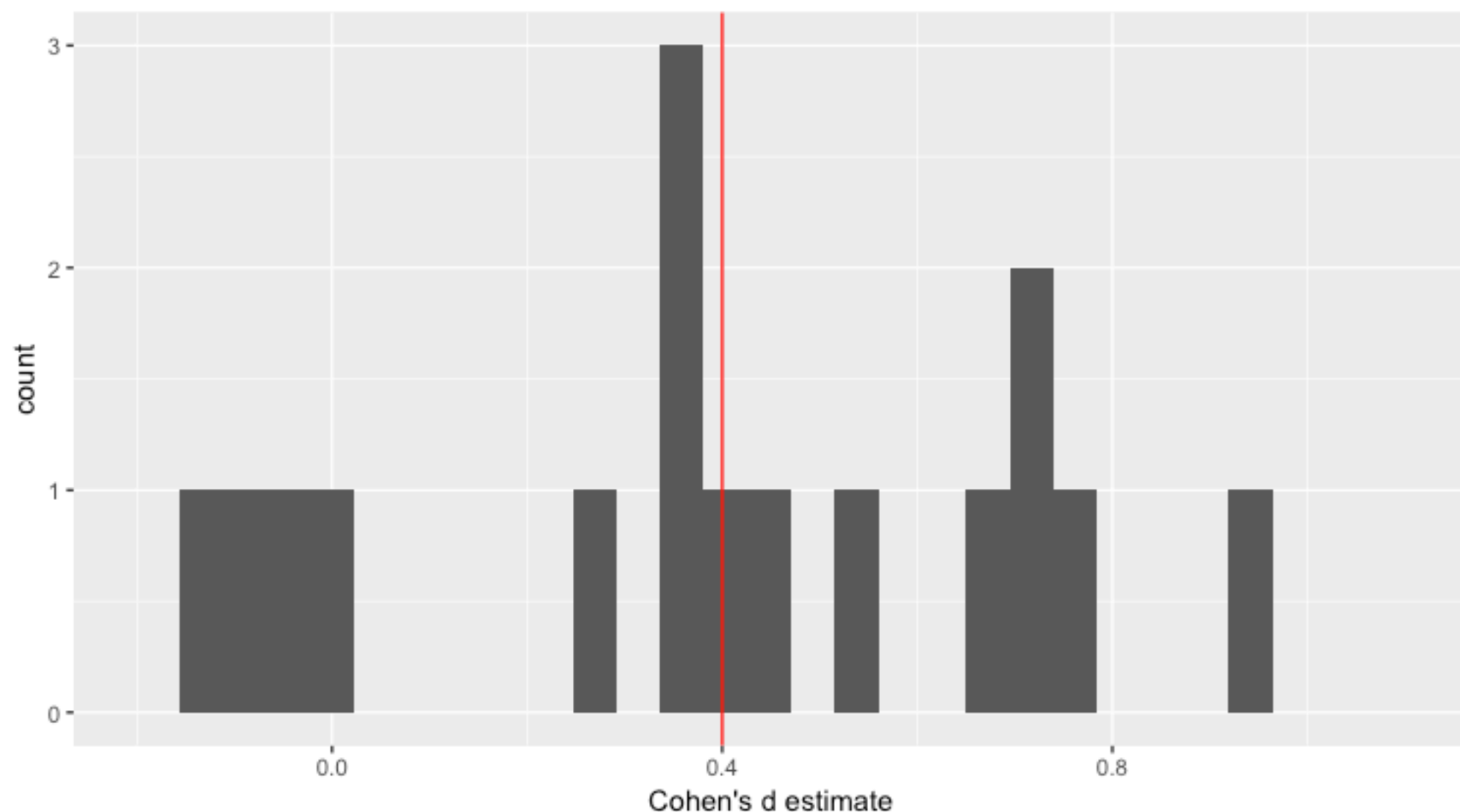- Another problem with small sample studies is not just that they fail to find an effect, but they also provide quite wide estimates of the effect size - here is the histogram of Cohen's d values for the 17 significant results when we have a sample size = 24 with the red vertical line being the true effect size in the population.

- When we increase the sample size to 200 (for .8 power) we get a much more accurate (and less variable) view of the effect size - but each effect size estimate is still just one point drawn from a distribution of effect sizes .