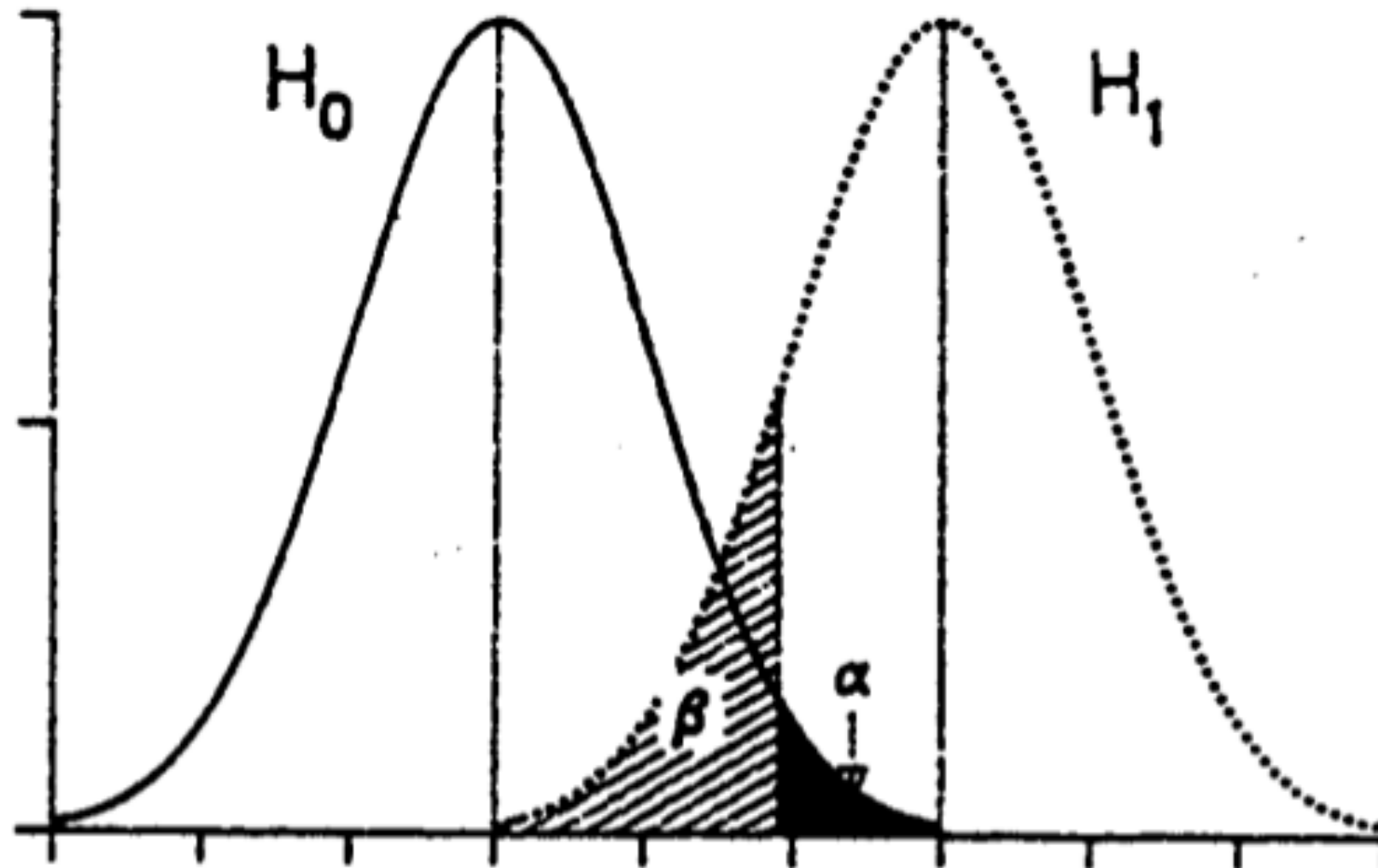


Power as a function of α



- If we were to increase α , we would increase power (by reducing β) but would risk a rise in the probability of a Type I error.

Calculating Power

- Power ($1-\beta$) is related to:
 - sample size (i.e., N)
 - effect size
 - α
- Cohen (1992) proposes that a reasonable level of Power to aim for should be around 0.8
- Power of 0.8 (with a β of 0.20), alongside an α of 0.05 results in a $\beta:\alpha$ ratio of 4:1 in terms of the risk associated with respective errors