

# 1 Point vs. Interval Estimation

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We have considered  $\bar{x}$  as an estimate of  $\mu_x$  and  $s_x^2$  as an estimate of  $\sigma_x^2$ .

Both of these are *point* estimates.

Point estimates need to be contrasted with *interval* estimates.

Interval estimates consider the probability that a particular population parameter (e.g.  $\mu_x$ ) is in some interval. E.g.

$$P[0 < \mu_x < 10]$$

I don't yet want to discuss interval estimators. To start, let's stick with point estimators. However, keep in mind that given the high likelihood that point estimates will be misintepreted, maybe society should ban the reporting of point estimates.