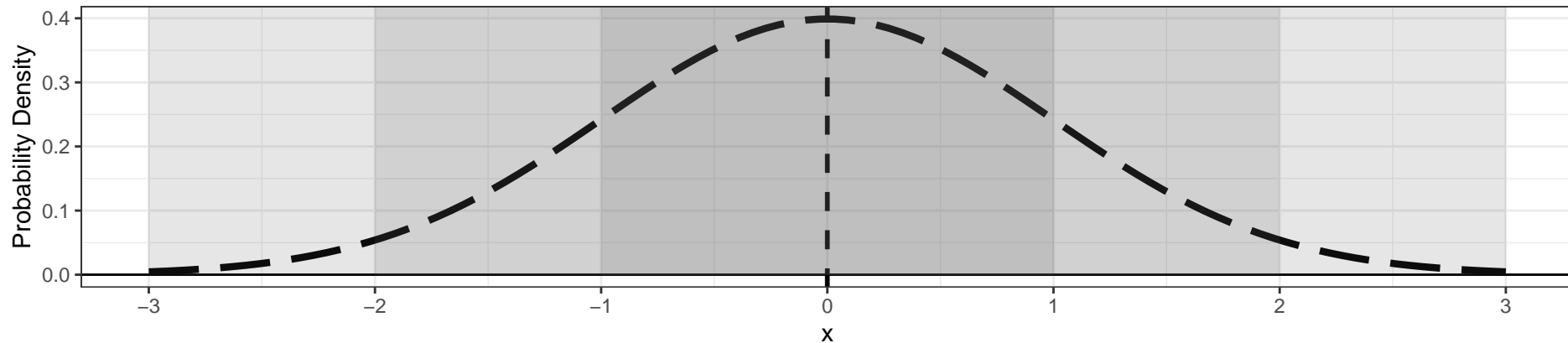


## Theoretical Normal Distribution of Variable $x$

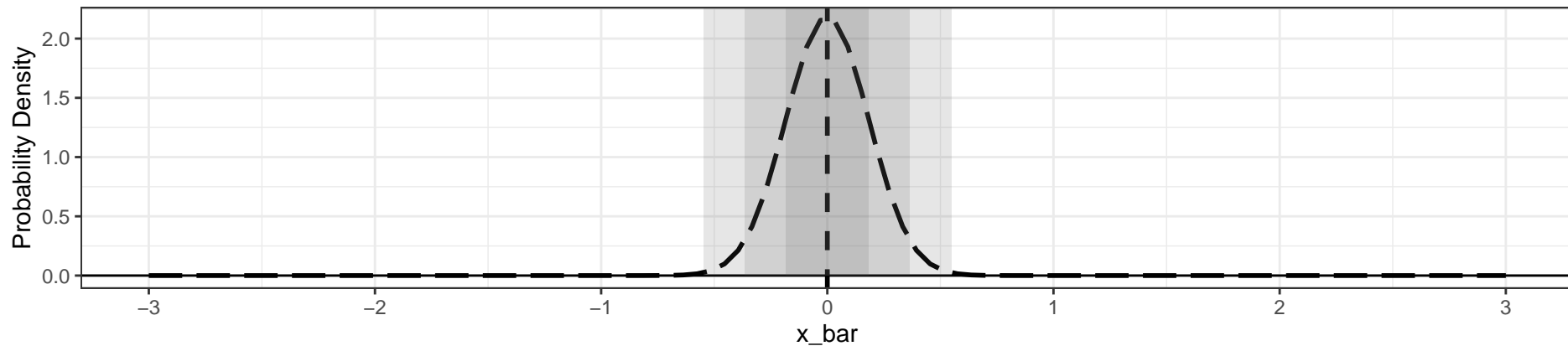
$$x \sim N(0, 1)$$



This represents the "true" underlying distribution of the variable  $x$ .

## Theoretical Sampling Distribution of Sample Statistic $\bar{x}$

$$\bar{x} \sim N(0, SE)$$



This represents the "true" underlying distribution of  $\bar{x}$  for the variable  $x \sim N(0, 1)$ .