

6.5

Types of bias in questions

1. The wording encourages or pressures the respondent to answer in a particular way.
2. The question may be perceived as too sensitive to answer truthfully.
3. The question may not provide the respondent with enough information to give an accurate opinion.

6.4

Types of samples

1. Self-selected: volunteers
2. Systematic: rule is used, such as every other person
3. Convenience: easy to reach
4. Random: each member of the population has an equal chance of being selected.

4. $n=1200$ 41%

$$\text{Margin of error} = \pm \frac{1}{\sqrt{n}} = \frac{1}{\sqrt{1200}} = .029$$

$41 - 2.9 = 38.1\%$
 $41 + 2.9 = 43.9\%$

between 38.1% and 43.9%

1. $\pm 2\%$

$$.02 = \frac{1}{\sqrt{n}}$$

$$\sqrt{n} = \frac{1}{.02}$$

$$n = \left(\frac{1}{.02}\right)^2 = 2500$$