

Tipo A

$N=100$   
 $\bar{x}=6$   
 $S_x=3$   
 $S^2_e=0.61$

1.  $r_{xx'} = 1 - \frac{S^2_e}{S^2_x}$

1.  $r_{xx'} = 1 - \frac{0.61}{9} = 1 - 0.0677 = \underline{0.93}$

2.  $r_{VX} = \sqrt{r_{xx'}} = \sqrt{0.93} = \underline{0.96}$

3.  $S_e = \sqrt{0.61} = \underline{0.78}$

4.  $S^2_V = S^2_x - S^2_e = 9 - 0.61 = \underline{8.39}$

$S^2_x = S^2_V + S^2_e \quad 9 = S^2_V + 0.61$

$N=600$

$\bar{x}=40$

$S_x=4 \rightarrow S^2_x=16$

5.  $r_{xV} = \sqrt{r_{xx'}} = \sqrt{0.70} = \underline{0.84}$

6.  $S_e = S_x \cdot \sqrt{1 - r_{xx'}} = 4 \sqrt{1 - 0.70}$

$= 4 \cdot \sqrt{0.3} =$

$4 \cdot 0.55 \approx \underline{2.2}$

$0.30 = \frac{S^2_e}{S^2_x}$

$\frac{S^2_e}{S^2_x} = r_{xx'}$

$0.70 = \frac{S^2_V}{S^2_x} = r_{xx'}$

7.  $\sum x = \frac{X - \bar{x}}{S_x} \Rightarrow -10 = \frac{X - 40}{4} \rightarrow -40 = X - 40 \rightarrow 80 = X$   
 $0 = X - 40$   
 $40 = X$

$\sum x = 10$

$N_e = 95\% = 196$

$V' = r_{xx'}(x - \bar{x}) + \bar{x} = 0.7(10 - 40) + 40 = -28 + 40 = \underline{12}$

9.  $\rightarrow E_{max} = z_c \cdot S_{VX} = 1.96 \cdot 1.85 = \underline{3.63}$

Error típico de estimación de la puntuación real

8.  $\rightarrow S_{VX} = S_e \sqrt{r_{xx'}} = 2.2 \cdot 0.84 = \underline{1.85}$

10.  $\rightarrow V' \pm E_{max} \quad 12 \pm 3.63 \leq \begin{matrix} 15.63 \\ 8.37 \end{matrix}$