

## Lampiran 10

### Hasil Uji Coba Reliabilitas Variabel Lingkungan Belajar di Rumah (X<sub>2</sub>) Manual

Reliabilitas angket dengan rumus *Alpha Cronbach* dan jumlah varian butir soaldi cari dengan rumus berikut:

$$\sigma_i^2 = \frac{\sum X_i^2 - \frac{(\sum X_i)^2}{N}}{N}$$

$$\sigma_1^2 = \frac{63 - \frac{(27)^2}{12}}{12} = \frac{63 - 60,75}{12} = 0,187$$

$$\sigma_2^2 = \frac{59 - \frac{(25)^2}{12}}{12} = \frac{59 - 52,08}{12} = 0,577$$

$$\sigma_3^2 = \frac{44 - \frac{(22)^2}{12}}{12} = \frac{44 - 40,33}{12} = 0,305$$

$$\sigma_4^2 = \frac{36 - \frac{(20)^2}{12}}{12} = \frac{36 - 33,33}{12} = 0,222$$

$$\sigma_5^2 = \frac{83 - \frac{(31)^2}{12}}{12} = \frac{83 - 80,08}{12} = 0,243$$

$$\sigma_6^2 = \frac{42 - \frac{(22)^2}{12}}{12} = \frac{42 - 40,33}{12} = 0,139$$

$$\sigma_7^2 = \frac{42 - \frac{(22)^2}{12}}{12} = \frac{42 - 40,33}{12} = 0,139$$

$$\sigma_8^2 = \frac{54 - \frac{(24)^2}{12}}{12} = \frac{54 - 48}{12} = 0,5$$

$$\sigma_9^2 = \frac{47 - \frac{(23)^2}{12}}{12} = \frac{47 - 44,08}{12} = 0,243$$

$$\sigma_{10}^2 = \frac{56 - \frac{(25)^2}{12}}{12} = \frac{56 - 52,08}{12} = 0,326$$

$$\sigma_{11}^2 = \frac{65 - \frac{(27)^2}{12}}{12} = \frac{65 - 60,75}{12} = 0,354$$

$$\sigma_{12}^2 = \frac{69 - \frac{(27)^2}{12}}{12} = \frac{69 - 60,75}{12} = 0,688$$

$$\sigma_{13}^2 = \frac{93 - \frac{(33)^2}{12}}{12} = \frac{93 - 90,75}{12} = 0,188$$

$$\sigma_{14}^2 = \frac{93 - \frac{(33)^2}{12}}{12} = \frac{93 - 90,75}{12} = 0,188$$

$$\sigma_{15}^2 = \frac{39 - \frac{(21)^2}{12}}{12} = \frac{39 - 36,75}{12} = 0,187$$

$$\sigma_{16}^2 = \frac{95 - \frac{(33)^2}{12}}{12} = \frac{95 - 90,75}{12} = 0,354$$

$$\sigma_{17}^2 = \frac{103 - \frac{(35)^2}{12}}{12} = \frac{103 - 102}{12} = 0,083$$

$$\sigma_{18}^2 = \frac{90 - \frac{(32)^2}{12}}{12} = \frac{90 - 85,33}{12} = 0,389$$

$$\sigma_{19}^2 = \frac{95 - \frac{(33)^2}{12}}{12} = \frac{95 - 90,75}{12} = 0,354$$

$$\sigma_{20}^2 = \frac{49 - \frac{(23)^2}{12}}{12} = \frac{49 - 44,08}{12} = 0,41$$

$$\sigma_{21}^2 = \frac{83 - \frac{(29)^2}{12}}{12} = \frac{83 - 70,08}{12} = 1,07$$

$$\sigma_{22}^2 = \frac{78 - \frac{(30)^2}{12}}{12} = \frac{78 - 75}{12} = 0,25$$

Jumlah total varians item

$$\sigma_i^2 = 0,187 + 0,577 + 0,305 + 0,222 + 0,243 + 0,139 + 0,139 + 0,5 + 0,243 + 0,326 + 0,354 + 0,688 + 0,188 + 0,188 + 0,187 + 0,354 + 0,083 + 0,389 + 0,354 + 0,41 + 1,07 + 0,25$$

$$\sigma_i^2 = 7,396$$

Varian total item

$$\sigma_t^2 = \frac{30200 - \frac{(593)^2}{12}}{12} = \frac{30200 - 29304,08}{12} = 74,66$$

Menghitung nilai Alpha dengan rumus

$$r_{11} = \left( \frac{k}{k-1} \right) \left( 1 - \frac{\sum \sigma_i^2}{\sigma_t^2} \right)$$

$$r_{11} = \left( \frac{12}{12-1} \right) \left( 1 - \frac{7,396}{74,66} \right)$$

$$r_{11} = (1,09)(1 - 0,099)$$

$$r_{11} = (1,09)(0,9)$$

$$r_{11} = 0,98 \text{ (Reliabilitas Sangat Tinggi)}$$

