Lampiran 11

**ANALISIS DATA STATISTIK**

**Nilai Hasil *Posttest* kelas VIII SMP Negeri 1 MA’RANG KAB. PANGKEP**

 **Kelas Eksperimen (Varibel X) dan Kelas Kontrol (Variabel Y)**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **No.** | **X** | **Y** | **X2** | **Y2** | **X.Y** |
| 1. | 90 | 85 | 8.100 | 7.225 | 7.650 |
| 2. | 80 | 90 | 6.400 | 8.100 | 7.200 |
| 3. | 80 | 70 | 6.400 | 4.900 | 5.600 |
| 4. | 80 | 75 | 6.400 | 5.525 | 6.000 |
| 5. | 75 | 70 | 5.625 | 4.900 | 5.250 |
| 6. | 90 | 80 | 8.100 | 6.400 | 7.200 |
| 7. | 85 | 85 | 7.225 | 7.225 | 7.225 |
| 8. | 75 | 90 | 5.625 | 8.100 | 6.750 |
| 9. | 85 | 85 | 7.225 | 7.225 | 7.225 |
| 10. | 85 | 80 | 7.225 | 6.400 | 6.800 |
| 11. | 85 | 70 | 7.225 | 4.900 | 5.950 |
| 12. | 95 | 70 | 9.025 | 4.900 | 6.650 |
| 13. | 85 | 75 | 7.225 | 5.525 | 6.375 |
| 14. | 90 | 70 | 8.100 | 4.900 | 6.300 |
| 15. | 85 | 70 | 7.225 | 4.900 | 5.950 |
| 16. | 75 | 80 | 5.625 | 6.400 | 6.000 |
| 17. | 85 | 80 | 7.225 | 6.400 | 6.800 |
| 18. | 85 | 75 | 7.225 | 5.525 | 6.375 |
| 19. | 90 | 80 | 8.100 | 6.400 | 7.200 |
| 20. | 80 | 70 | 6.400 | 4.900 | 5.600 |
| 21. | 95 | 75 | 9.025 | 5.525 | 7.125 |
| 22. | 85 | 70 | 7.225 | 4.900 | 5.950 |
| **JUMLAH** | **∑(x) 1860** | **∑(y) 1695** | **∑(x)2157950** | **∑(y)2131175** | **∑(x.y)143175** |

1. Nilai rata-rata hasil belajar kelompok eksperimen X

$$Mx=\frac{\sum\_{}^{}x}{N}$$

$$Mx=\frac{1860}{22}$$

$$Mx=84,545$$

1. Nilai rata-rata hasil belajar kelompok kontrol Y

$$My=\frac{\sum\_{}^{}y}{N}$$

$$My=\frac{1695}{22}$$

$$My=77.045$$

1. Nilai Standar Deviasi Kuadrat kelompok eksperimen X

$$SDx^{2}=\frac{\sum\_{}^{}x^{2}}{N}-Mx^{2}$$

$$SDx^{2}=\frac{157950}{22}-(84,54)^{2}$$

$$SDx^{2}=7179.545-7147.837$$

$$SDx^{2}=31.708$$

1. Nilai Standar Deviasi Kuadrat Kelompok Kontrol Y

$$SDy^{2}=\frac{\sum\_{}^{}y^{2}}{N}-My^{2}$$

$$SDy^{2}=\frac{131175}{22}-(72,045)^{2}$$

$$=5962.5-5935.932$$

$=26,568$

1. Nilai Standar Deviasi rata-rata Kuadrat Kelompok Eksperimen X

$$SD^{2}Mx=\frac{SDx^{2}}{N-1}$$

$$SD^{2}Mx=\frac{31.708}{22-1}$$

$$SD^{2}Mx=\frac{31.708}{21}$$

$$SD^{2}Mx=1.50990$$

1. Nilai Standar Deviasi rata-rata Kuadrat Kelompok Kontrol Y

$$SD^{2}My=\frac{SDy^{2}}{N-1}$$

$$SD^{2}My=\frac{26.568}{22-1}$$

$$SD^{2}Mx=\frac{26.568}{21}$$

$$SD^{2}Mx=1.26514$$

1. Nilai SDbm

$$SD\_{bm}=\sqrt{SD^{2}Mx+SD^{2}My}$$

$$SD\_{bm}=\sqrt{1.50990 +1.26514}$$

$$SD\_{bm}=\sqrt{2.77504}$$

$$SD\_{bm}=1.66584$$

Setelah mendapatkan hasil perhitungan diatas maka selanjutnya dimasukkan dalam rumus t-test dan mencari interpretasinya untuk menguji hipotesis.

$$t-test= \frac{Mx-My}{SD\_{bm}}$$

$$t-test=\frac{84.545-77.045}{1.66584}$$

$$t-test=\frac{7.5}{1.66584}$$

$$=4.50223$$

$$d.b=\left(Nx+Ny\right)-2$$

$$d.b=\left(22+22\right)-2$$

$$d.b=42$$