

Lampiran 1

Daftar hasil tes Power Otot Lengan(X_1), Kelentukan Pinggang (X_2), dan Lemparan Jarak 5 meter (Penalty Shoot) (Y).

| No. | Nama | Power Otot Lengan (X_1) | Kelentukan Pinggang (X_2) | Penalty 5meter (Y) |
|-----|------------|-----------------------------|-------------------------------|--------------------|
| 1 | F. I | 8,95 | 35,5 | 16.25 |
| 2 | M. C. L | 5,95 | 35,9 | 16.15 |
| 3 | A. N. H. K | 9,95 | 43,6 | 20.1 |
| 4 | F. F. P | 9,55 | 38,7 | 19.97 |
| 5 | A. N. U | 10,15 | 38,8 | 20.17 |
| 6 | A. D. C. S | 8,85 | 42,5 | 20.35 |
| 7 | G. P. L | 8,88 | 42,5 | 20.5 |
| 8 | S. M | 10,1 | 38,8 | 21.44 |
| 9 | A. R. S | 8,9 | 39,8 | 20.45 |
| 10 | A. N. T | 10 | 40,1 | 19.15 |
| 11 | D. R. P | 10,9 | 39,9 | 21.5 |
| 12 | V. P. R | 8,85 | 40,8 | 19.15 |
| 13 | F. I | 6,35 | 39,9 | 16.15 |
| 14 | E. E. L | 5,85 | 42,9 | 18.9 |
| 15 | B. C. L | 7,95 | 37,8 | 19.8 |

Data Mentah hasil Power Otot Lengan (X_1), Kelentukan Pinggang (X_2), dan Penalty Shoot (Y)

| No. | X_1 | X_2 | Y | X_1^2 | X_2^2 | Y^2 |
|--------|--------|-------|--------|---------|----------|---------|
| 1 | 8.95 | 35.50 | 16.25 | 80.10 | 1260.25 | 264.06 |
| 2 | 5.95 | 35.90 | 16.15 | 35.40 | 1288.81 | 260.82 |
| 3 | 9.95 | 43.60 | 20.1 | 99.00 | 1900.96 | 404.01 |
| 4 | 9.55 | 38.70 | 19.97 | 91.20 | 1497.69 | 398.80 |
| 5 | 10.15 | 38.80 | 20.17 | 103.02 | 1505.44 | 406.83 |
| 6 | 8.85 | 42.50 | 20.35 | 78.32 | 1806.25 | 414.12 |
| 7 | 8.88 | 42.50 | 20.5 | 78.85 | 1806.25 | 420.25 |
| 8 | 10.1 | 38.80 | 21.44 | 102.01 | 1505.44 | 459.67 |
| 9 | 8.9 | 39.80 | 20.45 | 79.21 | 1584.04 | 418.20 |
| 10 | 10 | 40.10 | 19.15 | 100.00 | 1608.01 | 366.72 |
| 11 | 10.9 | 39.90 | 21.5 | 118.81 | 1592.01 | 462.25 |
| 12 | 8.85 | 40.80 | 19.15 | 78.32 | 1664.64 | 366.72 |
| 13 | 6.35 | 39.90 | 16.15 | 40.32 | 1592.01 | 260.82 |
| 14 | 5.85 | 42.90 | 18.9 | 34.22 | 1840.41 | 357.21 |
| 15 | 7.95 | 37.80 | 19.8 | 63.20 | 1428.84 | 392.04 |
| Jumlah | 174.04 | 795.7 | 384.73 | 1553.44 | 31771.59 | 7449.11 |

Lampiran 2

Langkah-langkah perhitungan

Perhitungan distribusi frekuensi dan T skor data mentah hasil pengukuran Power Otot Lengan (X_1), Kelentukan Pinggang (X_2), dan Lemparan Jarak 5 meter Penalty Shoot (Y).

1. Menentukan Rentang

$$\begin{aligned} \text{Rentang} &= \text{Data terbesar} - \text{data terkecil} \\ &= 10,30 - 7,90 \\ &= 2,4 \end{aligned}$$

2. Banyaknya Interval Kelas

$$\begin{aligned} \text{Kelas} &= 1 + (3.3) \text{ Log } n \text{ (sturges)} \\ &= 1 + (3.3) \log 15 \\ &= 1 + (3.3) 1.17 \\ &= 1 + 3,86 \\ &= 4,86 \approx 5 \end{aligned}$$

3. Panjang Kelas Interval

$$\begin{aligned} P &= \frac{\text{Rentang}}{\text{Kelas}} \\ &= \frac{2,40}{5} = 0.48 \approx 0,5 \end{aligned}$$

| Kelas Interval | Titik Tengah | Frekuensi | | |
|----------------|--------------|-----------|---------|-----------|
| | | Absolut | Relatif | Kumulatif |
| 7.90 – 8.40 | 8.15 | 1 | 15% | 15.0% |
| 8.41 – 8.90 | 8.65 | 2 | 10% | 20.0% |
| 8.91 – 9.40 | 9.15 | 3 | 20% | 55.0% |
| 9.41 - 9.90 | 9.65 | 5 | 30% | 75.0% |
| 9.91 - 10.40 | 10.15 | 4 | 25% | 100.0% |
| Jumlah | | 15 | 100% | |

4. Rata-rata (\bar{X})

$$\begin{aligned} &= \frac{\sum X_1}{n} \\ &= \frac{141.95}{15} \\ &= 9,46 \end{aligned}$$

$$\begin{aligned}
 5. \text{ Simpangan baku} &= \sqrt{\frac{n \sum X_1^2 - (\sum X_1)^2}{n(n-1)}} \\
 &= \sqrt{\frac{15(1349,29) - (141,95)^2}{15(15-1)}} \\
 &= \sqrt{\frac{20239,31 - 20149,80}{210}} \\
 &= \sqrt{0,43} = 0,65 \\
 6. \text{ Varians} &= 1,95 \\
 7. \text{ Tskor (untuk } n=1) &= 50 \pm 10 \left(\frac{Xn - \bar{X}}{STD} \right) \\
 &= 50 \pm 10 \left(\frac{8,95 - 8,70}{1,43} \right) \\
 &= 51,73
 \end{aligned}$$

1. Menentukan Rentang

$$\begin{aligned} \text{Rentang} &= \text{Data terbesar} - \text{data terkecil} \\ &= 40 - 23 \\ &= 17 \end{aligned}$$

2. Banyaknya Interval Kelas

$$\begin{aligned} \text{Kelas} &= 1 + (3.3) \text{ Log } n \text{ (sturges)} \\ &= 1 + (3.3) \log 15 \\ &= 1 + (3.3) 1.17 \\ &= 1 + 3,86 \\ &= 4,86 \approx 5 \end{aligned}$$

3. Panjang Kelas Interval

$$\begin{aligned} P &= \frac{\text{Rentang}}{\text{Kelas}} \\ &= \frac{17}{5} = 3,4 \approx 3 \end{aligned}$$

| Kelas Interval | Titik Tengah | Frek. Absolut | Frek. Relatif | Frek. Komulatif |
|----------------|--------------|---------------|---------------|-----------------|
| 23 - 26 | 36 | 3 | 20% | 15,0% |
| 27 - 30 | 42 | 4 | 28% | 30,0% |
| 31 - 34 | 32,5 | 1 | 6% | 65,0% |
| 35 - 38 | 54 | 6 | 40% | 75,0% |
| 39 - 41 | 59,5 | 1 | 6% | 100,0% |
| Jumlah | | 15 | 100,0% | |

$$\begin{aligned} 4. \text{ Rata-rata } (\bar{X}) &= \frac{\sum X_2}{n} \\ &= \frac{476}{15} \\ &= 31.73 \end{aligned}$$

$$5. \text{ Simpangan baku} = \sqrt{\frac{n \sum X_2^2 - (\sum X_2)^2}{n(n-1)}}$$

$$= \sqrt{\frac{15(15494) - (476)^2}{15(15-1)}}$$

$$= \sqrt{\frac{232,410 - 226,576}{210}}$$

$$= \sqrt{27,7} = 5,26$$

6. Varians = 5,73

7. Tskor (untuk n=1) = $50 \pm 10 \left(\frac{X_n - \bar{X}}{\text{STD}} \right)$

$$= 50 \pm 10 \left(\frac{35,5 - 39,79}{41,11} \right)$$

$$= 32,56$$

1. Menentukan Rentang

$$\begin{aligned}\text{Rentang} &= \text{Data terbesar} - \text{data terkecil} \\ &= 15 - 11 \\ &= 4\end{aligned}$$

2. Banyaknya Interval Kelas

$$\begin{aligned}\text{Kelas} &= 1 + (3.3) \text{ Log } n \text{ (sturges)} \\ &= 1 + (3.3) \log 15 \\ &= 1 + (3.3) 1.17 \\ &= 1 + 3,86 \\ &= 4,86 \approx 5\end{aligned}$$

3. Panjang Kelas Interval

$$\begin{aligned}P &= \frac{\text{Rentang}}{\text{Kelas}} \\ &= \frac{4}{5} = 0,8 \approx 1\end{aligned}$$

| Kelas Interval | Titik Tengah | Frek. Absolut | Frek. Relatif | Frek. Komulatif |
|-----------------------|---------------------|----------------------|----------------------|------------------------|
| 11 – 12 | 11,5 | 5 | 30% | 30% |
| 13 – 14 | 13,5 | 7 | 46% | 70% |
| 15 – 16 | 15,5 | 3 | 24% | 100% |
| 17 – 18 | 17,5 | 0 | 0% | |
| 19 - 20 | 19,5 | 0 | 0% | |
| Jumlah | | 15 | 100% | |

4. Rata-rata (\bar{Y})

$$\begin{aligned}&= \frac{\Sigma Y}{n} \\ &= \frac{196}{15} \\ &= 13,06\end{aligned}$$

5. Simpangan baku = $\sqrt{\frac{n \Sigma Y^2 - (\Sigma Y)^2}{n(n-1)}}$

$$= \sqrt{\frac{15(2586) - (196)^2}{15(15-1)}}$$

$$= \sqrt{\frac{38790 - 38416}{210}}$$

$$= \sqrt{1,78} = 1.33$$

6. Varians = 2.41

7. Tskor (untuk n=1) = $50 \pm 10 \left(\frac{X_n - \bar{X}}{\text{STD}} \right)$

$$= 50 \pm 10 \left(\frac{16,25 - 19,24}{1,59} \right)$$
$$= 51,73$$

Lampiran 3

Data Mentah yang diubah dalam T Skor

| No. | Power Otot Lengan (X1) | | Kelenturan Togok (X2) | | Throw In (Y) | |
|-----|------------------------|--------|-----------------------|--------|--------------|--------|
| | Data | T Skor | Data | T Skor | Data | T Skor |
| 1 | 8.95 | 51.73 | 35.50 | 32.56 | 16.25 | 31.26 |
| 2 | 5.95 | 30.78 | 35.90 | 34.19 | 16.15 | 30.63 |
| 3 | 9.95 | 58.72 | 43.60 | 65.53 | 20.10 | 55.42 |
| 4 | 9.55 | 55.92 | 38.70 | 45.58 | 19.97 | 54.60 |
| 5 | 10.15 | 60.11 | 38.80 | 45.99 | 20.17 | 55.86 |
| 6 | 8.85 | 51.03 | 42.50 | 61.05 | 20.35 | 56.99 |
| 7 | 8.88 | 51.24 | 42.50 | 61.05 | 20.50 | 57.93 |
| 8 | 10.10 | 59.76 | 38.80 | 45.99 | 21.44 | 63.83 |
| 9 | 8.90 | 51.38 | 39.80 | 50.06 | 20.45 | 57.62 |
| 10 | 10.00 | 59.07 | 40.10 | 51.28 | 19.15 | 49.46 |
| 11 | 10.90 | 65.35 | 39.90 | 50.47 | 21.50 | 64.20 |
| 12 | 8.85 | 51.03 | 40.80 | 54.13 | 19.15 | 49.46 |
| 13 | 6.35 | 33.57 | 39.90 | 50.47 | 16.15 | 30.63 |
| 14 | 5.85 | 30.08 | 42.90 | 62.68 | 18.90 | 47.89 |
| 15 | 7.95 | 44.75 | 37.80 | 41.92 | 19.80 | 53.54 |

Lampiran 4

Data Persiapan untuk Persiapan Regresi dan Korelasi

| No. | X ₁ | X ₂ | Y | X ₁ ² | X ₂ ² | Y ² | X ₁ X ₂ | X ₁ Y | X ₂ Y |
|--------|----------------|----------------|--------|-----------------------------|-----------------------------|----------------|-------------------------------|------------------|------------------|
| 1 | 51.73 | 32.56 | 31.26 | 2676.22 | 1059.98 | 977.10 | 1684.26 | 1617.07 | 1017.70 |
| 2 | 30.78 | 34.19 | 30.63 | 947.33 | 1168.66 | 938.26 | 1052.19 | 942.78 | 1047.14 |
| 3 | 58.72 | 65.53 | 55.42 | 3447.64 | 4294.10 | 3071.24 | 3847.67 | 3254.01 | 3631.56 |
| 4 | 55.92 | 45.58 | 54.60 | 3127.36 | 2077.84 | 2981.49 | 2549.15 | 3053.56 | 2488.99 |
| 5 | 60.11 | 45.99 | 55.86 | 3613.64 | 2115.12 | 3120.12 | 2764.65 | 3357.83 | 2568.94 |
| 6 | 51.03 | 61.05 | 56.99 | 2604.44 | 3727.31 | 3247.59 | 3115.70 | 2908.29 | 3479.19 |
| 7 | 51.24 | 61.05 | 57.93 | 2625.87 | 3727.31 | 3355.76 | 3128.49 | 2968.47 | 3536.66 |
| 8 | 59.76 | 45.99 | 63.83 | 3571.77 | 2115.12 | 4073.99 | 2748.59 | 3814.63 | 2935.47 |
| 9 | 51.38 | 50.06 | 57.62 | 2640.21 | 2506.11 | 3319.51 | 2572.28 | 2960.44 | 2884.28 |
| 10 | 59.07 | 51.28 | 49.46 | 3488.78 | 2629.87 | 2446.01 | 3029.03 | 2921.23 | 2536.28 |
| 11 | 65.35 | 50.47 | 64.20 | 4270.87 | 2547.03 | 4122.20 | 3298.19 | 4195.88 | 3240.27 |
| 12 | 51.03 | 54.13 | 49.46 | 2604.44 | 2930.24 | 2446.01 | 2762.54 | 2523.98 | 2677.20 |
| 13 | 33.57 | 50.47 | 30.63 | 1127.11 | 2547.03 | 938.26 | 1694.34 | 1028.36 | 1545.89 |
| 14 | 30.08 | 62.68 | 47.89 | 904.82 | 3928.78 | 2293.29 | 1885.43 | 1440.49 | 3001.64 |
| 15 | 44.75 | 41.92 | 53.54 | 2002.35 | 1757.27 | 2866.12 | 1875.81 | 2395.62 | 2244.23 |
| Jumlah | 1000.0 | 1000.0 | 1000.0 | 51900.0 | 51900.0 | 51900.0 | 50343.9 | 51227.3 | 50945.0 |
| h | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 6 | 0 |

$$\begin{array}{lll}
 \Sigma X_1 = 1000,00 & \Sigma X_1^2 = 51900,00 & \Sigma X_1 Y = 51227.36 \\
 \Sigma X_2 = 1000,00 & \Sigma X_2^2 = 51900,00 & \Sigma X_2 Y = 50945.00 \\
 \Sigma Y = 1000,00 & \Sigma Y^2 = 51900,00 & \Sigma X_1 X_2 = 50343.95
 \end{array}$$

Lampiran 5

Menghitung rata-rata dan simpangan baku T-skor

1. Power Otot Lengan (X_1)

Diketahui :

$$\begin{array}{ll}
 \Sigma X_1 & = 1000,00 \\
 \Sigma X_1^2 & = 51900,00
 \end{array}$$

$$\begin{aligned}
 \text{a. Rata-rata } (\bar{X}) &= \frac{\Sigma X_1}{n} \\
 &= \frac{1000}{20} \\
 &= 50,00
 \end{aligned}$$

$$\begin{aligned}
 \text{b. Simpangan baku} &= \sqrt{\frac{n \Sigma X_1^2 - (\Sigma X_1)^2}{n(n-1)}} \\
 &= \sqrt{\frac{20(51900) - (1000)^2}{20(20-1)}} \\
 &= \sqrt{\frac{1038000 - 1000000}{380}} \\
 &= \sqrt{100} = 10
 \end{aligned}$$

2. Kelentukan Togok (X_2)

Diketahui :

$$\begin{array}{ll}
 \Sigma X_2 & = 1000,00 \\
 \Sigma X_2^2 & = 51900,00
 \end{array}$$

$$\begin{aligned} \text{a. Rata-rata } (\bar{X}) &= \frac{\Sigma X_2}{n} \\ &= \frac{1000}{20} \\ &= 50,00 \end{aligned}$$

$$\begin{aligned} \text{b. Simpangan baku} &= \sqrt{\frac{n \Sigma X_2^2 - (\Sigma X_2)^2}{n(n-1)}} \\ &= \sqrt{\frac{20(51900) - (1000)^2}{20(20-1)}} \\ &= \sqrt{\frac{1038000 - 1000000}{380}} \\ &= \sqrt{100} = 10 \end{aligned}$$

3. Throw In (Y)

Diketahui :

$$\Sigma Y = 1000,00$$

$$\Sigma Y^2 = 51900,00$$

$$\begin{aligned} \text{a. Rata-rata } (\bar{X}) &= \frac{\Sigma Y}{n} \\ &= \frac{1000}{20} \\ &= 50,00 \end{aligned}$$

$$\begin{aligned} \text{b. Simpangan baku} &= \sqrt{\frac{n \Sigma Y^2 - (\Sigma Y)^2}{n(n-1)}} \\ &= \sqrt{\frac{20(51900) - (1000)^2}{20(20-1)}} \end{aligned}$$

$$= \sqrt{\frac{1038000 - 1000000}{380}}$$
$$= \sqrt{100} = 10$$

1. Regresi Y atas X_1

Diketahui :

$$\begin{array}{lll} \Sigma X_1 = 1000,00 & \Sigma X_1^2 = 51900,00 & \Sigma X_1 Y = 51227.36 \\ \Sigma X_2 = 1000,00 & \Sigma X_2^2 = 51900,00 & \Sigma X_2 Y = 50945.00 \\ \Sigma Y = 1000,00 & \Sigma Y^2 = 51900,00 & \Sigma X_1 X_2 = 50343.95 \end{array}$$

Diuraikan menjadi

$$\begin{aligned} a &= \frac{(\Sigma Y)(\Sigma X_1^2) - (\Sigma X_1)(\Sigma X_1 Y)}{n \Sigma X_1^2 - (\Sigma X_1)^2} \\ &= \frac{(1000)(51900) - (1000)(51227.36)}{20 \cdot 51900 - (1000)^2} \\ &= \frac{(51900000) - (51227362)}{1038000 - 1000000} \\ &= \frac{672638}{38000} \\ &= 17.70 \end{aligned}$$

$$\begin{aligned} b &= \frac{n (\Sigma X_1 Y) - (\Sigma X_1)(\Sigma Y)}{n \Sigma X_1^2 - (\Sigma X_1)^2} \\ &= \frac{20 (51227.36) - (1000)(1000)}{20 \cdot 51900 - (1000)^2} \\ &= \frac{(1024547) - (1000000)}{1038000 - 1000000} \\ &= \frac{24547}{38000} \\ &= 0,65 \end{aligned}$$

Jadi persamaan regresi Y terhadap X_1 adalah $\hat{Y} = 17,70 + 0,65 X_1$

2. Regresi Y atas X_2
Diuraikan menjadi

$$\begin{aligned}
 a &= \frac{(\Sigma Y)(\Sigma X_2^2) - (\Sigma X_2)(\Sigma X_2 Y)}{n \Sigma X_2^2 - (\Sigma X_2)^2} \\
 &= \frac{(1000)(51900) - (1000)(50945.00)}{20 \cdot 51900 - (1000)^2} \\
 &= \frac{(51900000) - (50945000)}{1038000 - 1000000} \\
 &= \frac{955000}{38000} \\
 &= 25.13
 \end{aligned}$$

$$\begin{aligned}
 b &= \frac{n(\Sigma X_2 Y) - (\Sigma X_2)(\Sigma Y)}{n \Sigma X_2^2 - (\Sigma X_2)^2} \\
 &= \frac{20(50945.00) - (1000)(1000)}{20 \cdot 51900 - (1000)^2} \\
 &= \frac{(1018900) - (1000000)}{1038000 - 1000000} \\
 &= \frac{18900}{38000} \\
 &= 0,50
 \end{aligned}$$

Jadi persamaan regresi Y terhadap X_2 adalah $\hat{Y} = 25,13 + 0,50 X_2$

3. Regresi Y atas X_1 dan X_2

Dimana:

$$\Sigma y^2 = \Sigma Y^2 - \frac{(\Sigma Y)^2}{n} = 51900 - \frac{(1000)^2}{20} = 1900$$

$$\Sigma x_1^2 = \Sigma X_1^2 - \frac{(\Sigma X_1)^2}{n} = 51900 - \frac{(1000)^2}{20} = 1900$$

$$\Sigma x_2^2 = \Sigma X_2^2 - \frac{(\Sigma X_2)^2}{n} = 51900 - \frac{(1000)^2}{20} = 1900$$

$$\Sigma x_1 y = \Sigma X_1 Y - \frac{(\Sigma X_1)(\Sigma Y)}{n} = 51227.36 - \frac{(1000)(1000)}{20} = 1227.36$$

$$\Sigma x_2 y = \Sigma X_2 Y - \frac{(\Sigma X_2)(\Sigma Y)}{n} = 50945.00 - \frac{(1000)(1000)}{20} = 945.00$$

$$\Sigma x_1 x_2 = \Sigma X_1 X_2 - \frac{(\Sigma X_1)(\Sigma X_2)}{n} = 50343.95 - \frac{(1000)(1000)}{20} = 343.95$$

$$\begin{aligned} b_1 &= \frac{(\Sigma x_1 y)(\Sigma x_2^2) - (\Sigma x_1 x_2)(\Sigma x_2 y)}{(\Sigma x_1^2)(\Sigma x_2^2) - (\Sigma x_1 x_2)^2} \\ &= \frac{(1227.36)(1900) - (343.95)(945.00)}{(1900)(1900) - (343.95)^2} \\ &= \frac{(2331987) - (325032)}{(3610000) - (118301)} \\ &= \frac{2006955}{3491699} \\ &= 0.57 \end{aligned}$$

$$\begin{aligned} b_2 &= \frac{(\Sigma x_2 y)(\Sigma x_1^2) - (\Sigma x_1 x_2)(\Sigma x_1 y)}{(\Sigma x_1^2)(\Sigma x_2^2) - (\Sigma x_1 x_2)^2} \\ &= \frac{(945.00)(1900) - (343.95)(1227.36)}{(1900)(1900) - (343.95)^2} \end{aligned}$$

$$\begin{aligned} &= \frac{(1795499) - (422150)}{(3610000) - (118301)} \\ &= \frac{1373349}{3491699} \\ &= 0,39 \end{aligned}$$

$$\begin{aligned} b_0 &= \bar{Y} - b_1\bar{X}_1 - b_2\bar{X}_2 \\ &= (50) - (0,57 \cdot 50) - (0,39 \cdot 50) \\ &= 50 - 28,5 - 19,7 \\ &= 1,83 \end{aligned}$$

Jadi persamaan regresi berganda Y terhadap X_1 dan X_2 adalah
 $\hat{Y} = 1,83 + 0,57X_1 + 0,39X_2$

Lampiran 6

Mencari koefisien korelasi dan uji keberartian koefisien korelasi

1. Koefisien Korelasi r_{y_1}

$$\begin{aligned}
 r_{y_1} &= \frac{n \sum X_1 Y - (\sum X_1)(\sum Y)}{\sqrt{\{n \sum X_1^2 - (\sum X_1)^2\} \{n \sum Y^2 - (\sum Y)^2\}}} \\
 &= \frac{20 \ 51227.36 - (1000)(1000)}{\sqrt{\{20 \ 51900 - (1000)^2\} \{20 \ 51900 - (1000)^2\}}} \\
 &= \frac{1024547 - 1000000}{\sqrt{(38000)(38000)}} \\
 &= \frac{24547}{38000} \\
 &= 0.65
 \end{aligned}$$

2. Uji Keberartian koefisien korelasi

$$\begin{aligned}
 t_{\text{hitung}} &= \frac{(r_{y_1}) \left(\sqrt{n-2} \right)}{\sqrt{1 - (r_{y_1})^2}} \\
 &= \frac{(0,65) \left(\sqrt{20-2} \right)}{\sqrt{1 - (0,65)^2}} \\
 &= \frac{(0,65)(4,24)}{\sqrt{0.58}} \\
 &= \frac{2,74}{0.76} \\
 &= 3.60
 \end{aligned}$$

$$\begin{aligned}\text{Derajat kebebasan (dk)} &= n - 2 \\ &= 20 - 2 \\ &= 18\end{aligned}$$

$$\begin{aligned}t_{\text{tabel}} &= \text{dk} : 1 - \frac{1}{2} \alpha \\ &= 18 : 1 - \frac{1}{2} (0,05) \\ &= 18 : 0,975 \\ &= 2,10\end{aligned}$$

Berarti :

t_{tabel} dengan $\alpha = 0,05$ dan $\text{dk} = 18$ diperoleh sebesar 2,10. Karena $t_{\text{hitung}} = 3,60 > t_{\text{tabel}}$, dengan demikian kita tolak H_0 , berarti koefisien korelasi 0,65 adalah signifikan

3. Koefisien Korelasi r_{y_2}

$$\begin{aligned}r_{y_2} &= \frac{n \Sigma X_2 Y - (\Sigma X_2)(\Sigma Y)}{\sqrt{\{n \Sigma X_2^2 - (\Sigma X_2)^2\} \{n \Sigma Y^2 - (\Sigma Y)^2\}}} \\ &= \frac{20 \ 50945,00 - (1000)(1000)}{\sqrt{\{20 \ 51900 - (1000)^2\} \{20 \ 51900 - (1000)^2\}}} \\ &= \frac{1018900 - 1000000}{\sqrt{(38000)(38000)}} \\ &= \frac{18900}{38000} \\ &= 0,50\end{aligned}$$

4. Uji Keberartian koefisien korelasi

$$\begin{aligned}t_{\text{hitung}} &= \frac{(r_{y_2}) \left(\sqrt{n-2} \right)}{\sqrt{1 - (r_{y_2})^2}} \\ &= \frac{(0,50) \left(\sqrt{20-2} \right)}{\sqrt{1 - (0,50)^2}}\end{aligned}$$

$$\begin{aligned}
 &= \frac{(0,50)(4,24)}{\sqrt{0,75}} \\
 &= \frac{2,11}{0,87} \\
 &= 2,42
 \end{aligned}$$

$$\begin{aligned}
 \text{Derajat kebebasan (dk)} &= n - 2 \\
 &= 20 - 2 \\
 &= 18
 \end{aligned}$$

$$\begin{aligned}
 t_{\text{tabel}} &= \text{dk} : 1 - \frac{1}{2} \alpha \\
 &= 18 : 1 - \frac{1}{2} (0,05) \\
 &= 18 : 0,975 \\
 &= 2,10
 \end{aligned}$$

Berarti :

t_{tabel} dengan $\alpha = 0,05$ dan $\text{dk} = 18$ diperoleh sebesar 2,10. Karena $t_{\text{hitung}} = 2,42 > t_{\text{tabel}}$, dengan demikian kita tolak H_0 , berarti koefisien korelasi 0,50 adalah signifikan

5. Koefisien Korelasi ganda $r_{y_{1 \cdot 2}}$

$$\begin{aligned}
 \text{JK (Reg)} &= b_1 \cdot \sum x_1 y + b_2 \cdot \sum x_2 y \\
 &= (0,57 \times 1227,36) + (0,39 \times 945,00) \\
 &= 699,5962 + 368,5498 \\
 &= 1068,146
 \end{aligned}$$

$$r_{y_{1 \cdot 2}} = \sqrt{\frac{\text{JK Reg}}{\sum y}}$$

$$= \sqrt{\frac{1068,146}{1900}}$$

$$= \sqrt{0,562182}$$

$$= 0,749788$$

6. Uji Keberhasilan Koefisien Korelasi Berganda

$$F_{\text{hitung}} = \frac{(r_{y_{12}})^2 / K}{(1 - (r_{y_{12}})^2) / (n - 2 - 1)}$$

$$\begin{aligned} & \frac{(0.749788) / 2}{(1 - 0.749788) / 20 - 3} \\ & \frac{0.374894}{0.01471835} \\ & = 25.4712 \end{aligned}$$

Berarti

F_{tabel} dengan prediktor = 2 sebagai pembilang dan (n-K-1) = 17 sebagai penyebut F_{hitung} = 25,4712 > F_{tabel} (4,45) maka Koefisien korelasi berganda sebesar 0,749788 adalah signifikan.

Lampiran 7

DOKUMENTASI PENELITIAN



Foto 7.1. Alat Flexometer (Alat pengukur kelentukan pinggang)



Foto 7.2. Goal Post (Gawang Polo Air)



Foto 7.3. Mikasa W6009 (Bola Polo Air Putri)



Foto 7.4. Test pengukuran kekuatan otot lengan



Foto 7.5. Test pengukuran kelentukan pinggang



Foto 7.6. Persiapan test pelemparan jarak 5 meter (Penalty shoot)



Foto 7.7. Test lemparan jarak 5 meter (Penalty shoot)



Foto 7.8. Test lemparan jarak 5 meter (Penalty shoot)