

Lampiran 1

Tabel 8. Hasil Tes Pengukuran VO₂Max, Kapasitas Vital Paru, dan Denyut Nadi Pemulihan

No.	Nama	X₁	X₂	Y
1	M. Alfy	47.11	5.60	64
2	Ahmad Kholil R.	37.37	4.20	42
3	Ray Fernandes	48.82	4.30	53
4	Muel Simamora	45.39	4.50	68
5	Dimas Pamungkas	43.10	4.60	50
6	Adam Putro K.	47.11	4.10	72
7	Agus Sutiana	43.67	4.40	60
8	Ramadan Prasadhi	42.41	3.90	57
9	Chrisendi Pangestu	44.93	4.60	46
10	Hardimas Setia P.	48.83	5.80	82
11	Eko Budi Yanto	44.93	4.30	61
12	Sentot Suranto	41.95	4.20	45
13	Irham	43.96	4.40	87
14	Rifki Risanggeni	43.10	4.10	36
15	Muhammad Fajar R.	47.11	4.30	61
16	Helwi Januar A.	38.51	3.60	48
17	Arief Budi Karsa	35.07	4.10	46
18	Kevin Dhanu Andra	42.53	4.60	41
19	Miftahul Ulum	39.09	3.60	40
20	M. Krisna Desto	40.23	3.90	45

Lampiran 2

Langkah-langkah perhitungan Distribusi Frekuensi

A. Variabel Kapasitas Aerobik Maksimal (X_1)

$$\begin{aligned} \text{Rentang (R)} & : \text{Data Terbesar} - \text{Data Terkecil} \\ & : 48.83 - 35.07 \\ & : 13.76 \end{aligned}$$

$$\begin{aligned} \text{Banyak Kelas (BK)} & : 1 + (3.3) \log n \\ & : 1 + (3.3) \log 20 \\ & : 1 + (3.3) 1.301 \\ & : 1 + 4.29 \\ & : 5.29 (5) \end{aligned}$$

$$\begin{aligned} \text{Panjang Kelas (PK)} & : \frac{R}{BK} \\ & : \frac{13.76}{5} \\ & : 2.75 \end{aligned}$$

B. Variabel Kapasitas Vital Paru (X_2)

$$\begin{aligned} \text{Rentang (R)} & : \text{Data Terbesar} - \text{Data Terkecil} \\ & : 5.80 - 3.60 \\ & : 2.20 \end{aligned}$$

$$\begin{aligned} \text{Banyak Kelas (BK)} & : 1 + (3.3) \log n \\ & : 1 + (3.3) \log 20 \end{aligned}$$

$$\begin{aligned}
 & : 1 + (3.3) 1.301 \\
 & : 1 + 4.29 \\
 & : 5.29 (5) \\
 \text{Panjang Kelas (PK)} & : \frac{R}{BK} \\
 & : \frac{2.20}{5} \\
 & : 0.44
 \end{aligned}$$

C. Variabel Denyut Nadi Pemulihan (Y)

$$\begin{aligned}
 \text{Rentang (R)} & : \text{Data Terbesar} - \text{Data Terkecil} \\
 & : 87 - 36 \\
 & : 51 \\
 \text{Banyak Kelas (BK)} & : 1 + (3.3) \log n \\
 & : 1 + (3.3) \log 20 \\
 & : 1 + (3.3) 1.301 \\
 & : 1 + 4.29 \\
 & : 5.29 (5) \\
 \text{Panjang Kelas (PK)} & : \frac{R}{BK} \\
 & : \frac{51}{5} \\
 & : 10.2
 \end{aligned}$$

Lampiran 3

Tabel 9. Hasil Tes Pengukuran Dikuadratkan

NO.	NAMA	X1	X2	Y	X_1^2	X_2^2	Y^2
1	ALFY	47,11	5,6	64	2219,3521	31,36	4096
2	KHOLIL	37,37	4,2	42	1396,5169	17,64	1764
3	RAY	44,82	4,3	53	2008,8324	18,49	2809
4	MUEL	45,39	4,5	68	2060,2521	20,25	4624
5	DIMAS	43,1	4,6	50	1857,61	21,16	2500
6	ADAM	47,11	4,1	72	2219,3521	16,81	5184
7	AGUS	43,67	4,4	60	1907,0689	19,36	3600
8	ADI	42,41	3,9	57	1798,6081	15,21	3249
9	CHRIS	44,93	4,6	46	2018,7049	21,16	2116
10	HARDIMAS	48,83	5,8	82	2384,3689	33,64	6724
11	EKO	44,93	4,3	61	2018,7049	18,49	3721
12	SENTOT	41,95	4,2	45	1759,8025	17,64	2025
13	IRHAM	43,96	4,4	87	1932,4816	19,36	7569
14	KIKI	43,1	4,1	36	1857,61	16,81	1296
15	PAKOY	47,11	4,3	61	2219,3521	18,49	3721
16	HELWI	38,51	3,6	48	1483,0201	12,96	2304
17	ARIEF	35,07	4,1	46	1229,9049	16,81	2116
18	KEVIN	42,53	4,6	41	1808,8009	21,16	1681
19	ULUM	39,09	3,6	40	1528,0281	12,96	1600
20	KRISNA	40,23	3,9	45	1618,4529	15,21	2025
JUMLAH		861,22	87,1	1104	37326,8244	384,97	64724

Lampiran 4

Langkah-langkah perhitungan T-Skor Hasil Pengukuran Kapasitas Aerobik Maksimal ($VO_2\text{Max}$), Kapasitas Vital (KV) Paru, dan Denyut Nadi Pemulihan.

Menggunakan rumus :

$$\text{T-Skor} = 50 \pm 10 \left(\frac{X_1 - \bar{X}_1}{STD} \right)$$

Langkah-langkah perhitungan :

A. Menghitung Rata-Rata dan Simpangan Baku

a. Variabel Kapasitas Aerobik Maksimal (X_1)

Diketahui : $\sum X_1 = 861.22$

$$\sum X_1^2 = 37326.8244$$

$$n = 20$$

$$\begin{aligned} 1. \text{ Rata-Rata } X_1 &= \frac{\sum X_1}{n} \\ &= \frac{861.22}{20} \\ &= 43.061 \end{aligned}$$

$$2. \text{ Simpangan Baku} = \sqrt{\frac{n \sum X_1^2 - (\sum X_1)^2}{n(n-1)}}$$

$$\begin{aligned}
&= \sqrt{\frac{20 (37326.8244) - (861.22)^2}{20(20-1)}} \\
&= \sqrt{\frac{746536.488 - 741699.8884}{380}} \\
&= \sqrt{12.727} \\
&= 3,568
\end{aligned}$$

b. Variabel Kapasitas Vital Paru (X_2)

Diketahui

$$\begin{aligned}
&: \sum X_2 = 87.10 \\
&\sum X_2^2 = 384.97 \\
&n = 20
\end{aligned}$$

1. Rata-Rata X_1

$$\begin{aligned}
&= \frac{\sum X_2}{n} \\
&= \frac{87.10}{20} \\
&= 4.355
\end{aligned}$$

2. Simpangan Baku

$$\begin{aligned}
&= \sqrt{\frac{n \sum X_2^2 - (\sum X_2)^2}{n(n-1)}} \\
&= \sqrt{\frac{20 (384.97) - (87.10)^2}{20(20-1)}} \\
&= \sqrt{\frac{7699.4 - 7586.41}{380}} \\
&= \sqrt{0,297}
\end{aligned}$$

$$= 0.545$$

c. Denyut Nadi Pemulihan (Y)

Diketahui

$$\begin{aligned} : \Sigma Y &= 1104 \\ \Sigma Y^2 &= 64724 \\ n &= 20 \end{aligned}$$

1. Rata-Rata Y

$$\begin{aligned} &= \frac{\Sigma Y}{n} \\ &= \frac{1104}{20} \\ &= 55.200 \end{aligned}$$

2. Simpangan Baku

$$\begin{aligned} &= \sqrt{\frac{n \Sigma Y^2 - (\Sigma Y)^2}{n(n-1)}} \\ &= \sqrt{\frac{20(64724) - (1104)^2}{20(20-1)}} \\ &= \sqrt{\frac{1294480 - 1218816}{380}} \\ &= \sqrt{199.115} \\ &= 14.110 \end{aligned}$$

B. Menentukan T-Skor

Contoh : n ke-1 dari X_1

$$\begin{aligned} \text{T-Skor} &= 50 + 10 \left(\frac{47.11 - 43.061}{3.568} \right) \\ &= 50 + 10 (1.1348) \\ &= 50 + 11.348 \\ &= 61.348 \end{aligned}$$

Contoh : n ke-1 dari X_2

$$\begin{aligned} \text{T-Skor} &= 50 + 10 \left(\frac{5.60 - 4.355}{0.545} \right) \\ &= 50 + 10 (2.2844) \\ &= 50 + 22.844 \\ &= 72.844 \end{aligned}$$

Contoh : n ke-1 dari Y

$$\begin{aligned} \text{T-Skor} &= 50 + 10 \left(\frac{64 - 55.200}{14.110} \right) \\ &= 50 + 10 (0.6237) \\ &= 50 + 6.237 \\ &= 56.237 \end{aligned}$$

Lampiran 5

Tabel 10. Hasil T-Skor

NO.	NAMA	T-Skor X1	T-Skor X2	T-Skor Y	X_1^2	X_2^2	Y^2
1	ALFY	61,348	72,844	56,237	3763,589	5306,254	3162,568
2	KHOLIL	34,050	47,156	40,645	1159,395	2223,685	1652,011
3	RAY	54,930	48,991	48,441	3017,298	2400,101	2346,513
4	MUEL	56,527	52,661	59,072	3195,354	2773,134	3489,452
5	DIMAS	50,109	54,495	46,315	2510,942	2969,750	2145,049
6	ADAM	61,348	45,321	61,906	3763,589	2054,002	3832,408
7	AGUS	51,707	50,826	53,402	2673,597	2583,251	2851,757
8	ADI	48,175	41,651	51,276	2320,874	1734,837	2629,196
9	CHRIS	55,238	54,495	43,480	3051,262	2969,750	1890,493
10	HARDIMAS	66,169	76,514	68,994	4378,300	5854,356	4760,120
11	EKO	55,238	48,991	54,111	3051,262	2400,101	2927,953
12	SENTOT	46,886	47,156	42,771	2198,317	2223,685	1829,366
13	IRHAM	52,520	50,826	72,537	2758,310	2583,251	5261,646
14	KIKI	50,109	45,321	36,393	2510,942	2054,002	1324,423
15	PAKOY	61,348	48,991	54,111	3763,589	2400,101	2927,953
16	HELWI	37,245	36,147	44,897	1387,187	1306,590	2015,762
17	ARIEF	27,604	45,321	43,480	761,964	2054,002	1890,493
18	KEVIN	48,512	54,495	39,936	2353,392	2969,750	1594,901
19	ULUM	38,871	36,147	39,227	1510,917	1306,590	1538,797
20	KRISNA	42,066	41,651	42,771	1769,513	1734,837	1829,366
JUMLAH		1000	1000	1000	51900	51900	51900

Lampiran 6

Menghitung Rata-Rata dan Simpangan Baku

a. Variabel Kapasitas Aerobik Maksimal (X_1)

$$\begin{aligned} \text{Diketahui} \quad & : \sum X_1 = 1000 \\ & \sum X_1^2 = 51900 \\ n & = 20 \end{aligned}$$

$$\begin{aligned} 1. \text{ Rata-Rata } X_1 & = \frac{\sum X_1}{n} \\ & = \frac{1000}{20} \\ & = 50 \end{aligned}$$

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

b. Variabel Kapasitas Vital Paru (X_2)

Diketahui : $\sum X_2 = 1000$

$$\sum X_2^2 = 51900$$

$$n = 20$$

1. Rata-Rata $X_2 = \frac{\sum X_2}{n}$

$$= \frac{1000}{20}$$

$$= 50$$

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

$$= \sqrt{\frac{20 (51900) - (1000)^2}{20 (20-1)}}$$

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

$$= \sqrt{100}$$

$$= 10$$

c. Variabel Kapasitas Aerobik Maksimal (Y)

$$\text{Diketahui} \quad : \quad \Sigma Y = 1000$$

$$\Sigma Y^2 = 51900$$

$$n = 20$$

$$1. \text{ Rata-Rata } Y = \frac{\Sigma Y}{n}$$

$$= \frac{1000}{20}$$

$$= 50$$

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

$$= \sqrt{\frac{20 (51900) - (1000)^2}{20(20-1)}}$$

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

$$= \sqrt{100}$$

$$= 10$$

Lampiran 7

Mencari Persamaan Regresi

1. Regresi Y atas X_1

$$\begin{array}{ll} \text{Diketahui} & : \sum X_1 = 1000 & \sum X_1^2 = 51900 \\ & \sum Y = 1000 & \sum Y^2 = 51900 \\ & \sum X_1 Y = 51231.984 & n = 20 \end{array}$$

$$\begin{aligned} a &= \frac{(\sum Y)(\sum X_1^2) - (\sum X_1)(\sum X_1 Y)}{n \sum X_1^2 - (\sum X_1)^2} \\ &= \frac{(1000)(51900) - (1000)(51231.984)}{20(51900) - (1000)^2} \\ &= \frac{51900000 - 51231984}{1038000 - 1000000} \\ &= \frac{668016}{38000} \\ &= 17.579 \\ b &= \frac{n(\sum X_1 Y) - (\sum X_1)(\sum Y)}{n \sum X_1^2 - (\sum X_1)^2} \\ &= \frac{(20)(51231.984) - (1000)(1000)}{20(51900) - (1000)^2} \\ &= \frac{1024639.68 - 1000000}{1038000 - 1000000} \\ &= \frac{24639.68}{38000} \\ &= 0.648 \end{aligned}$$

Jadi persamaan regresi Y dengan X_1 adalah $\hat{Y} = 17.579 + 0.648X_1$

2. Regresi Y atas X_2

$$\begin{array}{ll} \text{Diketahui} & : \sum X_2 = 1000 & \sum X_2^2 = 51900 \\ & \sum Y = 1000 & \sum Y^2 = 51900 \\ & \sum X_2 Y = 50949.031 & n = 20 \end{array}$$

$$\begin{aligned} a &= \frac{(\sum Y)(\sum X_2^2) - (\sum X_2)(\sum X_2 Y)}{n \sum X_2^2 - (\sum X_2)^2} \\ &= \frac{(1000)(51900) - (1000)(50949.031)}{20(51900) - (1000)^2} \\ &= \frac{51900000 - 50949031}{1038000 - 1000000} \\ &= \frac{950969}{38000} \\ &= 25.025 \end{aligned}$$

$$\begin{aligned} b &= \frac{n(\sum X_2 Y) - (\sum X_2)(\sum Y)}{n \sum X_2^2 - (\sum X_2)^2} \\ &= \frac{(20)(50949.031) - (1000)(1000)}{20(51900) - (1000)^2} \\ &= \frac{1018980.62 - 1000000}{1038000 - 1000000} \\ &= \frac{18980.62}{38000} \\ &= 0.499 \end{aligned}$$

Jadi persamaan regresi Y dengan X_2 adalah $\hat{Y} = 25.025 + 0.499X_2$

3. Regresi Ganda Y atas X_1 dan X_2

Dicari dengan rumus sebagai berikut :

$$b_0 = \bar{Y} - b_1 \bar{X}_1 - b_2 \bar{X}_2$$

$$b_1 = \frac{(\sum x_2^2)(\sum x_1 y) - (\sum x_1 x_2)(\sum x_2 y)}{(\sum x_1^2)(\sum x_2^2) - (\sum x_1 x_2)^2}$$

$$b_2 = \frac{(\sum x_1^2)(\sum x_2 y) - (\sum x_1 x_2)(\sum x_1 y)}{(\sum x_1^2)(\sum x_2^2) - (\sum x_1 x_2)^2}$$

Dimana :

$$\sum y^2 = \sum Y^2 - \frac{(\sum Y)^2}{n}$$

$$\sum X_1^2 = \sum X_1^2 - \frac{(\sum X_1)^2}{n}$$

$$\sum X_2^2 = \sum X_2^2 - \frac{(\sum X_2)^2}{n}$$

$$\sum X_1 Y = \sum X_1 Y - \frac{(\sum X_1)(\sum Y)}{n}$$

$$\sum X_2 Y = \sum X_2 Y - \frac{(\sum X_2)(\sum Y)}{n}$$

$$\sum X_1 X_2 = \sum X_1 X_2 - \frac{(\sum X_1)(\sum X_2)}{n}$$

Diketahui :

$$\begin{array}{llll} \bar{X}_1 = 50 & \sum X_1 = 1000 & \sum X_1^2 = 51900 & \sum X_1 Y = \\ 51231.984 & & & \end{array}$$

$$\begin{array}{llll} \bar{X}_2 = 50 & \sum X_2 = 1000 & \sum X_2^2 = 51900 & \sum X_2 Y = \\ 50949.031 & & & \end{array}$$

$$\begin{array}{llll} \bar{Y} = 50 & \sum Y = 1000 & \sum Y^2 = 51900 & \sum X_1 X_2 = \\ 51222.174 & & & \end{array}$$

Jadi,

$$\begin{aligned} \sum Y^2 &= \sum Y^2 - \frac{(\sum Y)^2}{n} \\ &= 51900 - \frac{(1000)^2}{20} \\ &= 1900 \end{aligned}$$

$$\begin{aligned} \sum X_1^2 &= \sum X_1^2 - \frac{(\sum X_1)^2}{n} \\ &= 51900 - \frac{(1000)^2}{20} \\ &= 1900 \end{aligned}$$

$$\begin{aligned} \sum X_2^2 &= \sum X_2^2 - \frac{(\sum X_2)^2}{n} \\ &= 51900 - \frac{(1000)^2}{20} \\ &= 1900 \end{aligned}$$

$$\begin{aligned}
 \sum x_1 y &= \sum X_1 Y - \frac{(\sum X_1)(\sum Y)}{n} \\
 &= 51231.984 - \frac{(1000)(1000)}{20} \\
 &= 1231.984
 \end{aligned}$$

$$\begin{aligned}
 \sum x_2 y &= \sum X_2 Y - \frac{(\sum X_2)(\sum Y)}{n} \\
 &= 50949.031 - \frac{(1000)(1000)}{20} \\
 &= 949.031
 \end{aligned}$$

$$\begin{aligned}
 \sum x_1 x_2 &= \sum X_1 X_2 - \frac{(\sum X_1)(\sum X_2)}{n} \\
 &= 51222.174 - \frac{(1000)(1000)}{20} \\
 &= 1222.174
 \end{aligned}$$

$$\begin{aligned}
 b_1 &= \frac{(\sum x_2^2)(\sum x_1 y) - (\sum x_1 x_2)(\sum x_2 y)}{(\sum x_1^2)(\sum x_2^2) - (\sum x_1 x_2)^2} \\
 &= \frac{(1900)(1232.984) - (1222.174)(949.031)}{(1900)(1900) - (1222.174)^2} \\
 &= \frac{2340769,60 - 1159881,01}{3610000 - 1493709.28} \\
 &= \frac{1180887.99}{2116290.72} \\
 &= 0.557
 \end{aligned}$$

$$\begin{aligned}
 b_2 &= \frac{(\sum x_1^2)(\sum x_2 y) - (\sum x_1 x_2)(\sum x_1 y)}{(\sum x_1^2)(\sum x_2^2) - (\sum x_1 x_2)^2} \\
 &= \frac{(1900)(949.031) - (1222.174)(1231.984)}{(1900)(1900) - (1222.174)^2} \\
 &= \frac{1803158.90 - 1505698.81}{3610000 - 1493709.28} \\
 &= \frac{297460.09}{2116290.72} \\
 &= 0.140
 \end{aligned}$$

$$\begin{aligned}
 b_0 &= \bar{Y} - b_1 \bar{X}_1 - b_2 \bar{X}_2 \\
 &= 50 - (0.557 \times 50) - (0.140 \times 50) \\
 &= 50 - 27.85 - 7 \\
 &= 15.15
 \end{aligned}$$

Jadi persamaan regresi ganda Y dengan X_1 dan X_2 adalah $\hat{Y} = 15.15 + 0.557X_1 + 0.140X_2$

Lampiran 8

Mencari Koefisien Korelasi dan Uji Keberartian Koefisien Korelasi

1. Koefisien Korelasi r_{X_1Y}

$$\begin{aligned}
 r_{X_1Y} &= \frac{n \sum X_1 Y - (\sum X_1) (\sum Y)}{\sqrt{\{n \sum X_1^2 - (\sum X_1)^2\} \{n \cdot \sum Y^2 - (\sum Y)^2\}}} \\
 &= \frac{20 (51231.984) - (1000) (1000)}{\sqrt{\{20 (51900) - (1000)^2\} \{20 \cdot (51900) - (1000)^2\}}} \\
 &= \frac{1024639.68 - 1000000}{\sqrt{(1038000) - (1000000) (1038000) - (1000000)}} \\
 &= \frac{24639.68}{\sqrt{1444000000}} \\
 &= \frac{24639.68}{38000} \\
 &= 0.648
 \end{aligned}$$

2. Uji Keberartian Koefisien Korelasi

$$\begin{aligned}
 t &= \frac{r\sqrt{n-2}}{\sqrt{1-r^2}} \\
 &= \frac{0.648\sqrt{20-2}}{\sqrt{1-(0.648)^2}} \\
 &= \frac{0.648 \times 4.24}{\sqrt{1-(0.648)^2}}
 \end{aligned}$$

$$= \frac{0.648 \times 4.24}{\sqrt{1 - 0.419}}$$

$$= \frac{2.747}{\sqrt{0.581}}$$

$$= \frac{2.747}{0.762}$$

$$= 3.604$$

$$\text{Tabel dk} = n - 2$$

$$= 20 - 2$$

$$= 18$$

$$t_{\text{tabel}} = dk : 1 - \frac{1}{2} \alpha$$

$$= 18 : 1 - \frac{1}{2} 0.05$$

$$= 18 : 1 - 0.025$$

$$= 18 : 0.975$$

$$= 2.101$$

Berarti :

t_{tabel} dengan $\alpha = 0.05$ dan $dk = 18$ diperoleh tabel sebesar 2.101, karena

$t_{\text{hitung}} = 3.604 > t_{\text{tabel}} = 2.101$ dengan demikian kita tolak H_0 , berarti

koefisien korelasi 0.648 adalah signifikan.

3. Koefisien Korelasi r_{X_2Y}

$$\begin{aligned}
 r_{X_2Y} &= \frac{n \sum X_2 Y - (\sum X_2) (\sum Y)}{\sqrt{\{n \sum X_2^2 - (\sum X_2)^2\} \{n \cdot \sum Y^2 - (\sum Y)^2\}}} \\
 &= \frac{20 (50949.031) - (1000) (1000)}{\sqrt{\{20 (51900) - (1000)^2\} \{20 \cdot (51900) - (1000)^2\}}} \\
 &= \frac{1018980.62 - 1000000}{\sqrt{(1038000) - (1000000) (1038000) - (1000000)}} \\
 &= \frac{18980.62}{\sqrt{1444000000}} \\
 &= \frac{18980.62}{38000} \\
 &= 0.499
 \end{aligned}$$

4. Uji Keberartian Koefisien Korelasi

$$\begin{aligned}
 t &= \frac{r\sqrt{n-2}}{\sqrt{1-r^2}} \\
 &= \frac{0.499\sqrt{20-2}}{\sqrt{1-(0.499)^2}} \\
 &= \frac{0.499 \times 4.24}{\sqrt{1-(0.499)^2}} \\
 &= \frac{0.499 \times 4.24}{\sqrt{1-0.249}} \\
 &= \frac{2.116}{\sqrt{0.751}}
 \end{aligned}$$

$$= \frac{2.116}{0.866}$$

$$= 2.443$$

$$\text{Tabel dk} = n - 2$$

$$= 20 - 2$$

$$= 18$$

$$t_{\text{tabel}} = dk : 1 - \frac{1}{2} \alpha$$

$$= 18 : 1 - \frac{1}{2} 0.05$$

$$= 18 : 1 - 0.025$$

$$= 18 : 0.975$$

$$= 2.101$$

Berarti :

t_{tabel} dengan $\alpha = 0.05$ dan $dk = 18$ diperoleh tabel sebesar 2.101, karena

$t_{\text{hitung}} = 2.443 > t_{\text{tabel}} = 2.101$ dengan demikian kita tolak H_0 , berarti

koefisien korelasi 0.499 adalah signifikan.

5. Koefisien Korelasi ganda r_{y_1-2}

$$\text{JK (Reg)} = b_1 \cdot \sum x_1 y + b_2 \cdot \sum x_2 y$$

$$= 0.557 (1231.984) + 0.140 (949.031)$$

$$= 686.215 + 132.864$$

$$= 819.079$$

$$\begin{aligned} r_{y_{1-2}} &= \sqrt{\frac{JK(\text{Re } g)}{\Sigma y^2}} \\ &= \sqrt{\frac{819.079}{1900}} \\ &= \sqrt{0.431} \\ &= 0.656 \end{aligned}$$

6. Uji Keberartian Koefisien Korelasi ganda

$$\begin{aligned} F_{\text{hitung}} &= \frac{(r_{y_{1-2}}^2) / K}{(1 - (r_{y_{1-2}}^2)) / (n - 2 - 1)} \\ &= \frac{(0,656^2) / 2}{(1 - 0,656^2) / 20 - 2 - 1} \\ &= \frac{0.430/2}{0.570/17} \\ &= \frac{0.215}{0.033} \\ &= 6.515 \end{aligned}$$

Berarti :

F_{tabel} dicari dengan melihat daftar distribusi F dengan cacah prediktor = 2 sebagai pembilang dan $(n-k-1) = 17$ sebagai penyebut didapat $F_{\text{hitung}} =$

$6.515 > F_{\text{tabel}} = 3.59$, maka koefisien korelasi ganda $r_{y_1-2} = 0.656$ adalah signifikan.

Lampiran 9

Perhitungan Uji Koefisien Determinasi

Untuk mencari seberapa besar variasi variabel Y yang ditentukan oleh variabel X, maka digunakan Uji Koefisien Determinasi dengan rumus :

$$\begin{aligned}
 \text{KD} &= r_{x_1y}^2 \times 100\% \\
 &= 0.648^2 \times 100\% \\
 &= 0.4199 \times 100\% \\
 &= 41.99\%
 \end{aligned}$$

Dari hasil tersebut diinterpretasikan bahwa Denyut Nadi Pemulihan ditentukan oleh Kapasitas Aerobik Maksimal ($VO_2\text{Max}$) sebesar 41.99%.

$$\begin{aligned}
 \text{KD} &= r_{x_2y}^2 \times 100\% \\
 &= 0.499^2 \times 100\% \\
 &= 0.2490 \times 100\% \\
 &= 24.90\%
 \end{aligned}$$

Dari hasil tersebut diinterpretasikan bahwa Denyut Nadi Pemulihan ditentukan oleh Kapasitas Vital Paru (KV) sebesar 24.90%.

$$\begin{aligned}
 \text{KD} &= r_{y_{1-2}}^2 \times 100\% \\
 &= 0.656^2 \times 100\% \\
 &= 0.4303 \times 100\% \\
 &= 43.03\%
 \end{aligned}$$

Dari hasil tersebut di interpretasikan bahwa Denyut Nadi Pemulihan ditentukan oleh Kapasitas Aerobik Maksimal ($VO_2\text{Max}$) dan Kapasitas Vital Paru (KV) secara bersama-sama sebesar 43.03%.