

Lampiran 1

a. Distribusi data keseimbangan

$$\begin{aligned} \text{Rentang} &= \text{data terbesar} - \text{data terkecil} \\ &= 65,0 - 28,0 \\ &= 37 \end{aligned}$$

$$\begin{aligned} \text{Banyak kelas} &= 1 + (3,3) \log n \\ &= 1 + (3,3) \log 30 \\ &= 1 + (3,3) 1,477 \\ &= 1 + 4,8741 \\ &= 5,8741 = 6 \text{ kelas} \end{aligned}$$

$$\begin{aligned} \text{Panjang Kelas} &= \frac{\text{rentang}}{\text{banyakkelas}} \\ &= \frac{37}{6} \\ &= 6,16 = 7 \end{aligned}$$

b. Distribusi data kelincahan

$$\begin{aligned} \text{Rentang} &= \text{data terbesar} - \text{data terkecil} \\ &= 74,1 - 37,8 \\ &= 36,3 \end{aligned}$$

$$\begin{aligned} \text{Banyak kelas} &= 1 + (3,3) \log n \\ &= 1 + (3,3) \log 30 \\ &= 1 + (3,3) 1,477 \\ &= 1 + 4,8741 \\ &= 5,8741 = 6 \text{ kelas} \end{aligned}$$

$$\begin{aligned} \text{Panjang Kelas} &= \frac{\text{rentang}}{\text{banyakkelas}} \\ &= \frac{36,3}{6} \\ &= 6,05 = 7 \end{aligned}$$

c. Distribusi data menggiring bola

$$\begin{aligned} \text{Rentang} &= \text{data terbesar} - \text{data terkecil} \\ &= 65,3 - 20,9 \\ &= 44,4 \end{aligned}$$

$$\begin{aligned} \text{Banyak kelas} &= 1 + (3,3) \log n \\ &= 1 + (3,3) \log 30 \\ &= 1 + (3,3) 1,477 \\ &= 1 + 4,8741 \\ &= 5,8741 = 6 \text{ kelas} \end{aligned}$$

$$\begin{aligned} \text{Panjang Kelas} &= \frac{\text{rentang}}{\text{banyakkelas}} \\ &= \frac{44,4}{6} \\ &= 7,4 = 8 \end{aligned}$$

Lampiran 2

Tabel 8 : Data mentah hasil tes keseimbangan (X_1) dengan skor, tes kelincahan (X_2) dengan detik dan tes kecepatan menggiring bola (Y) dengan detik

NO	Dribbling	Keseimbangan	Kelincahan	
	Y	X_1	X_2 (kanan)	X_2 (kiri)
1	18,48	98	10,33	10,56
2	20,22	85	11,12	11,22
3	21,42	78	11,76	11,42
4	20,32	84	11,43	11,32
5	23,85	65	11,05	10,85
6	21,75	75	11,57	11,75
7	24,34	68	11,21	11,34
8	19,06	74	10,28	11,06
9	19,41	80	10,78	11,41
10	20,36	81	10,58	10,36
11	18,85	82	11,39	11,09
12	18,53	93	10,24	10,53
13	17,87	94	10,34	10,87
14	19,46	86	11,07	11,09
15	19,82	88	10,9	10,82
16	19,73	87	11,46	10,94
17	19,49	84	11,16	10,99
18	20,71	79	11,05	10,71
19	19,63	100	11,14	10,63
20	20,73	93	10,19	10,98
21	18,96	79	11,06	10,66
22	19,68	87	10,35	10,68
23	19,08	93	11,63	11,08
24	20,88	94	11,49	11,87
25	21,2	72	11,24	11,33
26	21,63	94	10,83	11,63
27	19,49	100	10,52	11,49
28	18,58	88	10,81	11,08
29	19,44	98	11,93	11,44
30	20,17	96	10,63	10,17
Jumlah	603,14	2575	309,0520833	331,37

Lampiran 3

Tabel 9 : Data mentah hasil tes keseimbangan (X_1) dengan skor, tes kelincahan dengan detik (X_2) dan tes kecepatan menggiring bola (Y) dengan detik.

NO	Y	X_1	X_2	Y^2	X_1^2	X_2^2	X_1Y	X_2Y	X_1X_2
1	18,48	98	10,45	341,51	9604	109,10	1811,04	193,02	1023,61
2	20,22	85	11,17	408,85	7225	124,77	1718,70	225,86	949,45
3	21,42	78	11,59	458,82	6084	134,33	1670,76	248,26	904,02
4	20,32	84	11,38	412,90	7056	129,39	1706,88	231,14	955,50
5	23,85	65	10,95	568,82	4225	119,90	1550,25	261,16	711,75
6	21,75	75	11,66	473,06	5625	135,96	1631,25	253,61	874,50
7	24,34	68	11,28	592,44	4624	127,13	1655,12	274,43	766,70
8	19,06	74	10,67	363,28	5476	113,85	1410,44	203,37	789,58
9	19,41	80	11,10	376,75	6400	123,10	1552,80	215,35	887,60
10	20,36	81	10,47	414,53	6561	109,62	1649,16	213,17	848,07
11	18,85	82	11,24	355,32	6724	126,34	1545,70	211,87	921,68
12	18,53	93	10,39	343,36	8649	107,85	1723,29	192,43	965,81
13	17,87	94	10,61	319,34	8836	112,47	1679,78	189,51	996,87
14	19,46	86	11,08	378,69	7396	122,77	1673,56	215,62	952,88
15	19,82	88	10,86	392,83	7744	117,94	1744,16	215,25	955,68
16	19,73	87	11,20	389,27	7569	125,44	1716,51	220,98	974,40
17	19,49	84	11,08	379,86	7056	122,66	1637,16	215,85	930,30
18	20,71	79	10,88	428,90	6241	118,37	1636,09	225,32	859,52
19	19,63	100	10,89	385,34	10000	118,48	1963,00	213,67	1088,50
20	20,73	93	10,59	429,73	8649	112,04	1927,89	219,43	984,41
21	18,96	79	10,86	359,48	6241	117,94	1497,84	205,91	857,94
22	19,68	87	10,52	387,30	7569	110,57	1712,16	206,94	914,81
23	19,08	93	11,36	364,05	8649	128,94	1774,44	216,65	1056,02
24	20,88	94	11,68	435,97	8836	136,42	1962,72	243,88	1097,92
25	21,2	72	11,29	449,44	5184	127,35	1526,40	239,24	812,52
26	21,63	94	11,23	467,86	8836	126,11	2033,22	242,90	1055,62
27	19,49	100	11,01	379,86	10000	121,11	1949,00	214,49	1100,50
28	18,58	88	10,95	345,22	7744	119,79	1635,04	203,36	963,16
29	19,44	98	11,69	377,91	9604	136,54	1905,12	227,16	1145,13
30	20,17	96	10,40	406,83	9216	108,16	1936,32	209,77	998,40
Jumlah	603,14	2575	330,46	12187,53	223623	3644,42	51535,80	6649,59	28342,83

Lampiran 4

Langkah- langkah perhitungan

Perhitungan Tskor hasil pengukuran Keseimbangan, Kelincahan dan kecepatan menggiring bola.

Menggunakan rumus :

$$Tskor = 50 \pm 10 \frac{(X-X)}{SD}$$

Langkah-langkah perhitungan

A. Menghitung rata-rata dan simpangan baku

a. Variabel Keseimbangan

Diketahui : $\sum X_1 = 2575$ $\sum X_1^2 = 223.623$ $n = 30$

$$\text{Rata-rata} = X_1 = \frac{\sum X_1}{n}$$

$$= \frac{2575}{30}$$

$$= 85,83$$

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

$$= \sqrt{\frac{30(223623) - (2575)^2}{30(30-1)}}$$

$$= \sqrt{\frac{6708690 - 6630625}{870}}$$

$$= \sqrt{\frac{78.065}{870}}$$

$$= \sqrt{89,73}$$

$$= 9,47$$

$$\text{Varians} = 89,73$$

b. Variabel Kelincahan

$$\text{Diketahui : } \sum X_2 = 330,46 \quad \sum X_2^2 = 3644,42 \quad n = 30$$

$$\text{Rata-rata} = \frac{\sum X_2}{n}$$

$$= \frac{330,46}{30}$$

$$= 11,01$$

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

$$= \sqrt{\frac{30(3644,42) - (330,46)^2}{30(30-1)}}$$

$$= \sqrt{\frac{109332,6 - 109203,812}{870}}$$

$$= \sqrt{\frac{128,788}{870}}$$

$$= \sqrt{0,15}$$

$$= 0,39$$

$$\text{Varians} = 0,15$$

c. Kecepatan Menggiring Bola

$$\text{Diketahui : } \sum Y = 603,14 \quad \sum Y^2 = 12188 \quad n = 30$$

$$\begin{aligned} \text{Rata-rata} &= \frac{\sum Y}{n} \\ &= \frac{603,14}{30} \\ &= 20,10 \end{aligned}$$

$$\begin{aligned} \text{Simpangan Baku} &= \sqrt{\frac{n \sum Y^2 - (\sum Y)^2}{n(n-1)}} \\ &= \sqrt{\frac{30(12188) - (603,14)^2}{30(30-1)}} \\ &= \sqrt{\frac{365640 - 363777,89}{870}} \\ &= \sqrt{\frac{1862,14}{870}} \\ &= \sqrt{2,14} \\ &= 1,46 \\ \text{Varians} &= 2,14 \end{aligned}$$

Lampiran 5

Menentukan Tskor

Contoh n ke-1 dari X_1

$$\text{Tskor} = 50 + 10 \frac{(98 - 85,83)}{9,47}$$

$$= 50 + 10 (12,84)$$

$$= 62,8$$

Contoh n ke-1 dari X_2

$$\text{Tskor} = 50 - 10 \frac{(10,33 - 10,30)}{2,71}$$

$$= 50 - 10 (0,011)$$

$$= 86,3$$

Contoh n ke-1 dari Y

$$\text{Tskor} = 50 - 10 \frac{(18,48 - 20,1)}{1,45}$$

$$= 50 - 10 (-1,11)$$

$$= 61,1$$

Lampiran 6

Tabel 10 : Data mentah yang dirubah dalam Tskor

HASIL TES							
NO	DATA MENTAH				DATA T-SKOR		
	Y	X ₁	X ₂ (KANAN)	X ₂ (KIRI)	Y	X ₁	X ₂
1	18,48	98	10,33	10,56	61,1	62,8	74,1
2	20,22	85	11,12	11,22	49,2	49,1	46,4
3	21,42	78	11,76	11,42	41,0	41,7	42,7
4	20,32	84	11,43	11,32	48,5	48,1	44,6
5	23,85	65	11,05	10,85	24,3	28,0	51,0
6	21,75	75	11,57	11,75	38,7	38,6	39,1
7	24,34	68	11,21	11,34	20,9	31,2	44,7
8	19,06	74	10,28	11,06	57,2	37,5	49,9
9	19,41	80	10,78	11,41	54,8	43,8	44,7
10	20,36	81	10,58	10,36	48,2	44,9	57,9
11	18,85	82	11,39	11,09	58,6	46,0	47,5
12	18,53	93	10,24	10,53	60,8	57,6	56,4
13	17,87	94	10,34	10,87	65,3	58,6	52,1
14	19,46	86	11,07	11,09	54,4	50,2	48,0
15	19,82	88	10,9	10,82	52,0	52,3	51,7
16	19,73	87	11,46	10,94	52,6	51,2	49,2
17	19,49	84	11,16	10,99	54,2	48,1	49,1
18	20,71	79	11,05	10,71	45,8	42,8	52,7
19	19,63	100	11,14	10,63	53,3	65,0	53,5
20	20,73	93	10,19	10,98	45,7	57,6	51,0
21	18,96	79	11,06	10,66	57,9	42,8	72,8
22	19,68	87	10,35	10,68	52,9	51,2	54,4
23	19,08	93	11,63	11,08	57,0	57,6	47,1
24	20,88	94	11,49	11,87	44,7	58,6	37,8
25	21,2	72	11,24	11,33	42,5	35,4	44,8
26	21,63	94	10,83	11,63	39,5	58,6	41,9
27	19,49	100	10,52	11,49	54,2	65,0	44,2
28	18,58	88	10,81	11,08	60,5	52,3	48,6
29	19,44	98	11,93	11,44	54,6	62,8	42,2
30	20,17	96	10,63	10,17	49,6	60,7	60,1
JUMLAH	603,14	2575	309,05	331,37	1500	1500	1500

Lampiran 7

Tabel 11 : Data Perhitungan Korelasi dan regresi

Y	X ₁	X ₂	Y ²	X ₁ ²	X ₂ ²	X ₁ Y	X ₂ Y	X ₁ X ₂
61,1	62,8	74,1	3738,97	3949,38	5485,67	3842,74	4528,88	4654,57
49,2	49,1	46,4	2421,49	2412,80	2149,94	2417,14	2281,68	2277,58
41,0	41,7	42,7	1678,97	1741,44	1827,53	1709,92	1751,68	1783,96
48,5	48,1	44,6	2354,44	2310,20	1987,10	2332,22	2162,99	2142,57
24,3	28,0	51,0	590,62	784,38	2602,20	680,64	1239,72	1428,67
38,7	38,6	39,1	1498,55	1487,14	1526,60	1492,83	1512,51	1506,74
20,9	31,2	44,7	438,51	971,80	2001,44	652,80	936,83	1394,63
57,2	37,5	49,9	3268,14	1406,84	2486,52	2144,23	2850,67	1870,33
54,8	43,8	44,7	2999,34	1922,11	1995,77	2401,05	2446,63	1958,59
48,2	44,9	57,9	2327,88	2015,79	3347,34	2166,22	2791,45	2597,60
58,6	46,0	47,5	3434,96	2111,70	2252,21	2693,25	2781,41	2180,82
60,8	57,6	56,4	3697,14	3313,81	3181,73	3500,23	3429,76	3247,10
65,3	58,6	52,1	4268,33	3436,46	2711,65	3829,88	3402,09	3052,62
54,4	50,2	48,0	2961,88	2517,63	2308,42	2730,73	2614,82	2410,75
52,0	52,3	51,7	2699,13	2733,96	2668,11	2716,49	2683,57	2700,84
52,6	51,2	49,2	2763,67	2624,68	2416,64	2693,28	2584,34	2518,51
54,2	48,1	49,1	2939,52	2310,20	2410,90	2605,93	2662,12	2360,01
45,8	42,8	52,7	2101,92	1830,66	2779,43	1961,61	2417,05	2255,70
53,3	65,0	53,5	2836,28	4219,21	2865,58	3459,32	2850,90	3477,14
45,7	57,6	51,0	2089,36	3313,81	2601,70	2631,30	2331,50	2936,25
57,9	42,8	72,8	3347,06	1830,66	5300,24	2475,34	4211,91	3114,95
52,9	51,2	54,4	2799,86	2624,68	2956,52	2710,86	2877,12	2785,66
57,0	57,6	47,1	3252,47	3313,81	2222,00	3283,00	2688,31	2713,54
44,7	58,6	37,8	1996,33	3436,46	1425,39	2619,22	1686,88	2213,21
42,5	35,4	44,8	1804,95	1252,91	2007,43	1503,81	1903,50	1585,91
39,5	58,6	41,9	1562,97	3436,46	1755,37	2317,56	1656,38	2456,07
54,2	65,0	44,2	2939,52	4219,21	1951,51	3521,71	2395,10	2869,46
60,5	52,3	48,6	3655,53	2733,96	2366,45	3161,34	2941,20	2543,58
54,6	62,8	42,2	2976,84	3949,38	1780,24	3428,80	2302,06	2651,57
49,6	60,7	60,1	2455,37	3688,46	3609,96	3009,41	2977,22	3649,00
1500	1500	1500	77900,00	77900,00	76981,59	76692,86	75900,25	75337,96

Lampiran 8

Menghitung rata-rata dari simpangan baku setelah dirubah dalam Tskor

a. Variabel Keseimbangan

$$\text{Diketahui : } \sum X_1 = 1500 \qquad \sum X_1^2 = 77.900 \qquad n = 30$$

$$\text{Rata-rata} = X_1 = \frac{\sum X_1}{n}$$

$$= \frac{1500}{30}$$

$$= 50$$

$$\text{Simpangan baku} = \sqrt{\frac{n \sum x_1^2 - (\sum X_1)^2}{n - (n-1)}}$$

$$= \sqrt{\frac{30 (77900) - (1500)^2}{30 - (30-1)}}$$

$$= \sqrt{\frac{2337000 - 2250000}{870}}$$

$$= \sqrt{100}$$

$$= 10$$

b. Variabel Kelincahan

$$\text{Diketahui : } \sum X_1 = 1500 \qquad \sum X_2 = 76.981,59 \qquad n = 30$$

$$\text{Rata-rata} = X_1 = \frac{\sum X_1}{n}$$

$$= \frac{1500}{30}$$

$$= 50$$

$$\begin{aligned} \text{Simpangan baku} &= \sqrt{\frac{n \sum x_1^2 - (\sum X^1)^2}{n - (n-1)}} \\ &= \sqrt{\frac{30 (76981,59) - (1500)^2}{30 - (30-1)}} \\ &= \sqrt{\frac{2309447,7 - 2250000}{870}} \\ &= \sqrt{68,33} \\ &= 8,27 \end{aligned}$$

c. Variabel Menggiring Bola

$$\text{Diketahui : } \sum X_1 = 1500 \qquad \sum X_2 = 77.900 \qquad n = 30$$

$$\begin{aligned} \text{Rata-rata} = X_1 &= \frac{\sum X_1}{n} \\ &= \frac{1500}{30} \\ &= 50 \end{aligned}$$

$$\begin{aligned} \text{Simpangan baku} &= \sqrt{\frac{n \sum x_1^2 - (\sum X^1)^2}{n - (n-1)}} \\ &= \sqrt{\frac{30 (77900) - (1500)^2}{30 - (30-1)}} \\ &= \sqrt{\frac{2337000 - 2250000}{870}} \\ &= \sqrt{100} \\ &= 10 \end{aligned}$$

Lampiran 9

Mencari Persamaan Regresi

1. Regresi Y atas X_1

$$\text{Diketahui : } \sum X_1 = 1500$$

$$\sum Y = 1500$$

$$\sum X_1^2 = 77900$$

$$\sum Y^2 = 77900$$

$$\sum X_1 Y = 76692,86$$

$$n = 30$$

$$\begin{aligned} \text{a.} &= \frac{(\sum Y)(\sum X_1^2) - (\sum X_1)(\sum X_1 Y)}{n(\sum X_1^2) - (\sum X_1)^2} \\ &= \frac{(1500)(77900) - (1500)(76692,86)}{30(77900) - (1500)^2} \\ &= \frac{116850000 - 115039290}{2337000 - 2250000} \\ &= \frac{1810710}{87000} \\ &= 20,81 \end{aligned}$$

$$\begin{aligned} \text{b.} &= \frac{n(\sum X_1 Y) - (\sum X_1)(\sum Y)}{n(\sum X_1^2) - (\sum X_1)^2} \\ &= \frac{30(76692,86) - (1500)(1500)}{30(77900) - (1500)^2} \\ &= \frac{2300785,8 - 2250000}{2337000 - 2250000} \\ &= \frac{50785,8}{87000} \\ &= 0,58 \end{aligned}$$

Jadi persamaan regresi Y terhadap X_1 adalah $\hat{Y} = 20,81 + 0,58$

2. Regresi Y atas X_2

$$\text{Diketahui : } \sum X_2 = 1500$$

$$\sum Y = 1500$$

$$\sum X_2^2 = 77900$$

$$\sum Y^2 = 77900$$

$$\sum X_2 Y = 75900,25$$

$$n = 30$$

$$\begin{aligned}
 \text{a.} &= \frac{(\sum Y)(\sum X_2^2) - (\sum X_2)(\sum X_2 Y)}{n(\sum X_2^2) - (\sum X_2)^2} \\
 &= \frac{(1500)(77900) - (1500)(75900,25)}{30(77900) - (1500)^2} \\
 &= \frac{116850000 - 113850375}{2337000 - 2250000} \\
 &= \frac{2999625}{87000} \\
 &= 34,48
 \end{aligned}$$

$$\begin{aligned}
 \text{b.} &= \frac{n(\sum X_2 Y) - (\sum X_2)(\sum Y)}{n(\sum X_2^2) - (\sum X_2)^2} \\
 &= \frac{30(75900,25) - (1500)(1500)}{30(77900) - (1500)^2} \\
 &= \frac{2277007,5 - 2250000}{2337000 - 2250000} \\
 &= \frac{27007,5}{870000} \\
 &= 0,31
 \end{aligned}$$

Jadi persamaan regresi Y terhadap X_2 adalah $\hat{Y} = 34,48 + 0,31$

3. Regresi Ganda Y atas X_1 dan X_2

Diketahui :

$$\begin{array}{llll}
 \bar{Y} = 50 & \sum X_1 = 1500 & \sum X_1^2 = 77900 & \sum X_1 Y = 76692,86 \\
 \bar{X}_1 = 50 & \sum X_2 = 1500 & \sum X_2^2 = 76981,59 & \sum X_2 Y = 75900,25 \\
 \bar{X}_2 = 50 & \sum Y = 1500 & Y^2 = 77900 & \sum X_1 X_2 = 75337,96
 \end{array}$$

Dicari dengan rumus :

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

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

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

Dimana :

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

$$\sum X_1^2 = \sum X_1^2 - \frac{(\sum x_1)^2}{n}$$

$$\sum x_2^2 = \sum X_2^2 - \frac{(\sum X_2)^2}{n}$$

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

$$\sum x_2 y = \sum X_2 Y - \frac{(\sum X_2)(\sum Y)}{n}$$

$$\sum x_1 x_2 = \sum X_1 X_2 - \frac{(\sum X_1)(\sum X_2)}{n}$$

Jadi :

$$\begin{aligned} \sum y^2 &= \sum Y^2 - \frac{(\sum Y)^2}{n} \\ &= 77900 - \frac{(1500)^2}{30} \\ &= 77900 - 75000 \\ &= 2900 \end{aligned}$$

$$\begin{aligned} \sum x_1^2 &= \sum X_1^2 - \frac{(\sum x_1)^2}{n} \\ &= 77900 - \frac{(1500)^2}{30} \\ &= 77900 - 75000 \\ &= 2900 \end{aligned}$$

$$\begin{aligned} \sum x_2^2 &= \sum X_2^2 - \frac{(\sum X_2)^2}{n} \\ &= 77900 - \frac{(1500)^2}{30} \\ &= 77900 - 75000 \\ &= 2900 \end{aligned}$$

$$\begin{aligned} \sum x_1 y &= \sum X_1 Y - \frac{(\sum X_1)(\sum Y)}{n} \\ &= 76692,86 - \frac{(1500)(1500)}{30} \end{aligned}$$

$$= 76692,86 - 75000$$

$$= 1692,86$$

$$\begin{aligned}\sum x_2 y &= \sum X_2 Y - \frac{(\sum X_2)(\sum Y)}{n} \\ &= 75900,25 - \frac{(1500)(1500)}{30} \\ &= 75900,25 - 75000 \\ &= 900,25\end{aligned}$$

$$\begin{aligned}\sum x_1 x_2 &= \sum X_1 X_2 - \frac{(\sum X_1)(\sum X_2)}{n} \\ &= 75337,96 - \frac{(1500)(1500)}{30} \\ &= 75337,96 - 75000 \\ &= 337,96\end{aligned}$$

$$\begin{aligned}b_1 &= \frac{(\sum x_2^2)(\sum x_1 y) - (\sum x_1 x_2)(\sum x_2 y)}{(\sum x_1^2)(\sum x_2^2) - (\sum x_1 x_2)^2} \\ &= \frac{(2900)(1692,86) - (337,96)(900,25)}{(2900)(2900) - (337,96)^2} \\ &= \frac{4909294 - 304248,49}{8410000 - 114216,962} \\ &= \frac{4605045,51}{8295783,04} \\ &= 0,55510674 \\ &= 0,55\end{aligned}$$

$$\begin{aligned}b_2 &= \frac{(\sum x_1^2)(\sum x_2 y) - (\sum x_1 x_2)(\sum x_1 y)}{(\sum x_1^2)(\sum x_2^2) - (\sum x_1 x_2)^2} \\ &= \frac{(2900)(900,25) - (337,96)(1692,86)}{(2900)(2900) - (337,96)^2} \\ &= \frac{2610725 - 572118,966}{8410000 - 114216,962} \\ &= \frac{2038606,03}{8295783,04} \\ &= 0,24574004 \\ &= 0,24\end{aligned}$$

$$\begin{aligned} b_0 &= \bar{Y} - b_1\bar{X}_1 - b_2\bar{X}_2 \\ &= 50 - 0,55 (50) - 0,24 (50) \\ &= 50 - 27,5 - 12 \\ &= 10,5 \end{aligned}$$

Jadi persamaan regresi ganda Y atas X_1 dan X_2 adalah $\hat{Y} = 10,5 + 0,55X_1 + 0,24X_2$

Lampiran 10

Mencari Koefisien Korelasi dan Uji Keberartian Koefisien Korelasi

1. Koefisien Korelasi ry_1

$$\begin{aligned}
 r &= \frac{n(\sum X_1 Y) - (\sum X_1)(\sum Y)}{\sqrt{(n(\sum X_1^2) - (\sum X_1)^2)(n(\sum Y^2) - (\sum Y)^2)}} \\
 &= \frac{30(1692,86) - (1500)(1500)}{\sqrt{(30(77900) - (1500)^2)(30(77900) - (1500)^2)}} \\
 &= \frac{2300785,8 - 2250000}{\sqrt{(2337000 - 2250000)(2337000 - 2250000)}} \\
 &= \frac{50785,8}{\sqrt{7569000000}} \\
 &= \frac{50785,8}{87000} \\
 &= 0,58
 \end{aligned}$$

2. Uji keberartian Koefisien Korelasi

$$\begin{aligned}
 t &= \frac{r\sqrt{n-2}}{\sqrt{1-r^2}} \\
 &= \frac{0,58\sqrt{30-2}}{\sqrt{1-0,58^2}} \\
 &= \frac{0,58\sqrt{28}}{\sqrt{1-0,3364}} \\
 &= \frac{3,0690715208349}{0,6636} \\
 &= 4,62
 \end{aligned}$$

$$\begin{aligned}
 \text{Tabel dk} &= n - 2 \\
 &= 30 - 2 \\
 &= 28
 \end{aligned}$$

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

$$\begin{aligned}
&= 28 : 1 - \frac{1}{2} 0,05 \\
&= 28 : 1 - 0,025 \\
&= 28 : 0,975 \\
&= 2,05
\end{aligned}$$

Berarti t_{tabel} dengan $\alpha = 0,05$ dan $dk = 28$ diperoleh tabel sebesar 2,05, karena $t_{hitung} = 4,62$ dan lebih besar dari $t_{tabel} = 2,05$ dengan demikian kita tolak H_0 . Berarti koefisien korelasi 0,58 adalah signifikan.

3. Koefisien korelasi ry_2

$$\begin{aligned}
r &= \frac{n(\sum X_2 Y) - (\sum X_2)(\sum Y)}{\sqrt{[n(\sum X_2^2) - (\sum X_2)^2][n(\sum Y^2) - (\sum Y)^2]}} \\
&= \frac{30(900,25) - (1500)(1500)}{\sqrt{[30(76981,59) - (1500)^2][30(779000) - (1500)^2]}} \\
&= \frac{2277007,5 - 2250000}{\sqrt{(59447,7)(87000)}} \\
&= \frac{27007,5}{\sqrt{5171949900}} \\
&= \frac{27007,5}{71916,27} \\
&= 0,37
\end{aligned}$$

4. Uji keberartian Koefisien Korelasi

$$\begin{aligned}
t &= \frac{r\sqrt{n-2}}{\sqrt{1-r^2}} \\
&= \frac{0,37\sqrt{30-2}}{\sqrt{1-0,37^2}} \\
&= \frac{1,9578559701878}{\sqrt{1-0,1369}} \\
&= \frac{1,9578559701878}{0,8631}
\end{aligned}$$

$$= 2,27$$

$$\begin{aligned} \text{Tabel dk} &= n - 2 \\ &= 30 - 2 \\ &= 28 \end{aligned}$$

$$\begin{aligned} t_{tabel} &= dk : 1 - \frac{1}{2} \alpha \\ &= 28 : 1 - \frac{1}{2} 0,05 \\ &= 28 : 1 - 0,025 \\ &= 28 : 0,0975 \\ &= 2,05 \end{aligned}$$

Berarti t_{tabel} dengan $\alpha = 0,05$ dan $dk = 28$ diperoleh tabel sebesar 2,05, karena $t_{hitung} = 2,27$ dan lebih besar dari $t_{tabel} = 2,05$ dengan demikian kita tolak H_0 . Berarti koefisien korelasi 0,37 adalah signifikan.

5. Mencari ry_{1-2} (koefisien korelasi ganda)

$$\begin{aligned} \text{JK (Reg)} &= b_1 \sum x_1 y + b_2 \sum x_2 y \\ &= 0,55(1692,86) + 0,24(900,25) \\ &= 931,073 + 216,06 \\ &= 1147,133 \end{aligned}$$

$$\begin{aligned} r_{y_{1-2}} &= \sqrt{\frac{\text{JK(Reg)}}{\sum y^2}} \\ &= \sqrt{\frac{1147,133}{2900}} \\ &= \sqrt{0,4} \\ &= 0,63 \end{aligned}$$

6. Uji Keberartian Koefisien Korelasi Ganda

$$\begin{aligned}
 F &= \frac{r^2/k}{1-r^2/n-k-1} \\
 &= \frac{0,63^2/2}{1-0,63^2/30-2-1} \\
 &= \frac{0,3969/2}{0,6031/27} \\
 &= \frac{0,19845}{0,02233} \\
 &= 8,89
 \end{aligned}$$

f_{tabel} dicari dengan cara melihat daftar distribusi F dengan cacah predictor = 2 sebagai pembilang dan ($n-k-1$) sebagai penyebut didapat $f_{hitung} = 8,89 > f_{tabel} = 3,35$, maka koefisien korelasi ganda $ry_{1-2} = 0,63$ adalah signifikan.

Lampiran 11

Tabel 12 Daftar Distribusi T

DISTRIBUSI STUDENT'S t						
α Untuk Uji Dua Pihak						
	0,50	0,20	0,10	0,05	0,02	0,01
dk	α Untuk Uji Satu Pihak					
	0,25	0,10	0,05	0,025	0,01	0,005
1	1,000	3,078	6,314	12,706	31,821	63,657
2	0,816	1,886	2,920	4,303	6,965	9,925
3	0,765	1,638	2,353	3,182	4,541	5,841
4	0,741	1,533	2,132	2,776	3,747	4,604
5	0,727	1,476	2,015	2,571	3,365	4,032
6	0,718	1,440	1,943	2,447	3,143	3,707
7	0,711	1,415	1,895	2,365	2,998	3,499
8	0,706	1,397	1,860	2,306	2,896	3,355
9	0,703	1,383	1,833	2,262	2,821	3,250
10	0,700	1,372	1,812	2,228	2,764	3,169
11	0,697	1,363	1,796	2,201	2,718	3,106
12	0,695	1,356	1,782	2,178	2,681	3,055
13	0,694	1,350	1,771	2,160	2,650	3,012
14	0,692	1,345	1,761	2,145	2,624	2,977
15	0,691	1,341	1,753	2,132	2,623	2,947
16	0,690	1,337	1,746	2,120	2,583	2,921
17	0,689	1,333	1,740	2,110	2,567	2,898
18	0,688	1,330	1,734	2,101	2,552	2,878
19	0,688	1,328	1,729	2,093	2,539	2,861
20	0,687	1,325	1,725	2,086	2,528	2,845
21	0,686	1,323	1,721	2,080	2,518	2,831
22	0,686	1,321	1,717	2,074	2,508	2,819
23	0,685	1,319	1,714	2,069	2,500	2,807
24	0,685	1,318	1,711	2,064	2,492	2,797
25	0,684	1,316	1,708	2,060	2,485	2,787
26	0,684	1,315	1,706	2,056	2,479	2,779
27	0,684	1,314	1,703	2,052	2,473	2,771
28	0,683	1,313	1,701	2,048	2,467	2,763
29	0,683	1,311	1,699	2,045	2,462	2,756
30	0,683	1,310	1,697	2,042	2,457	2,750
40	0,681	1,303	1,684	2,021	2,423	2,704
60	0,679	1,296	1,671	2,000	2,390	2,660
120	0,677	1,289	1,658	1,980	2,358	2,617
	0,674	1,282	1,645	1,960	2,326	2,576

LAMPIRAN 12

Tabel 13 : Data mentah tes keseimbangan I

No	Lingkaran / Pos										Nilai
	1	2	3	4	5	6	7	8	9	10	
1	10	10	10	10	8	10	10	10	10	10	98
2	8	10	9	7	10	10	8	9	8	8	85
3	10	8	7	6	10	6	7	8	9	7	78
4	10	8	8	9	7	8	9	7	8	10	84
5	8	6	7	6	7	6	6	7	6	6	65
6	10	8	7	6	9	6	7	6	9	7	75
7	9	7	6	8	5	6	7	5	7	8	68
8	10	7	9	6	8	6	8	6	7	7	74
9	10	8	8	10	7	8	7	7	8	8	80
10	10	6	10	8	8	9	8	7	8	8	81
11	10	7	10	7	9	7	8	7	10	7	82
12	10	10	10	9	10	8	8	10	10	8	93
13	10	9	10	10	10	7	10	10	8	10	94
14	10	9	10	10	8	7	8	7	8	9	86
15	10	8	9	10	8	7	8	7	10	7	84
16	10	7	10	7	10	7	10	8	10	8	87
17	10	8	10	7	9	7	8	10	8	7	84
18	10	8	7	8	6	7	6	9	6	8	75
19	10	10	10	10	10	10	10	10	10	10	100
20	10	10	10	9	10	8	9	10	10	7	93
21	10	7	8	10	6	7	6	8	7	8	77
22	10	10	7	10	8	8	10	7	8	9	87
23	10	10	10	10	10	8	8	10	10	7	93
24	6	6	7	6	7	8	10	6	7	8	71
25	5	7	6	5	7	8	6	9	8	7	68
26	10	8	10	9	10	8	10	10	9	10	94
27	10	10	10	10	10	10	10	10	10	10	100
28	10	10	8	10	9	7	8	7	10	9	88
29	10	9	10	7	10	10	8	10	8	10	92
30	10	10	9	10	10	9	10	8	10	10	96

Tabel 14 : Data mentah tes keseimbangan II

No	Lingkaran / Pos										Nilai
	1	2	3	4	5	6	7	8	9	10	
1	10	7	9	7	10	6	8	8	7	10	82
2	10	10	8	10	7	8	7	8	9	8	85
3	10	8	7	6	10	6	7	6	8	7	75
4	10	8	8	10	6	7	6	8	8	8	79
5	8	7	8	6	7	5	7	5	6	6	65
6	10	8	7	6	7	6	8	6	6	7	71
7	9	7	6	6	5	6	7	5	6	6	64
8	10	7	8	6	7	6	8	5	7	7	71
9	10	8	8	9	7	8	7	8	7	9	80
10	10	8	10	8	8	7	8	7	8	8	81
11	10	7	7	7	8	6	8	7	10	7	77
12	10	10	8	8	7	8	8	10	9	10	89
13	10	9	8	10	9	8	10	8	10	8	90
14	10	8	8	10	8	7	8	7	8	7	81
15	10	10	8	10	9	7	8	7	9	10	88
16	10	7	9	7	10	6	8	8	9	8	82
17	10	8	7	8	6	7	8	10	8	7	79
18	10	8	8	9	8	6	6	8	8	8	79
19	10	10	10	8	10	9	10	10	9	10	94
20	10	9	8	10	10	8	8	10	8	10	91
21	10	8	10	7	6	8	6	8	8	8	79
22	10	7	8	8	6	7	6	8	7	8	75
23	10	8	7	8	7	8	10	7	8	10	83
24	10	8	10	9	10	9	10	10	9	9	94
25	8	8	8	7	7	8	6	7	6	7	72
26	10	8	9	8	10	8	9	10	10	8	90
27	10	10	8	10	9	10	9	10	10	10	94
28	10	8	8	10	8	7	6	7	8	8	80
29	10	10	10	9	10	10	10	9	10	10	98
30	10	7	10	8	10	8	10	8	10	8	89

Tabel 15 : Data mentah tes kelincahan

NO	KANAN		TERBAIK	KIRI		TERBAIK
	I	II		I	II	
1	10,45	10,33	10,33	11,07	10,56	10,56
2	11,12	11,41	11,12	11,22	11,69	11,22
3	11,76	12,01	11,76	11,79	11,42	11,42
4	11,45	11,43	11,43	11,32	11,58	11,32
5	11,22	11,05	11,05	11,22	10,85	10,85
6	11,57	12,13	11,57	11,75	12,11	11,75
7	11,21	11,43	11,21	11,53	11,34	11,34
8	10,28	10,44	10,28	11,06	11,21	11,06
9	10,78	10,82	10,78	11,41	11,83	11,41
10	11,04	10,58	10,58	10,43	10,36	10,36
11	11,39	11,47	11,39	11,09	11,32	11,09
12	10,66	10,34	10,24	11,08	10,53	10,53
13	10,34	10,81	10,34	10,87	11,13	10,87
14	11,21	11,07	11,07	11,27	11,09	11,09
15	10,9	11,05	10,9	10,82	11,07	10,82
16	12,04	11,46	11,46	11,31	10,94	10,94
17	11,16	11,31	11,16	10,99	11,21	10,99
18	11,35	11,05	11,05	11,05	10,71	10,71
19	11,14	11,25	11,14	10,63	10,92	10,63
20	10,35	10,19	10,19	11,13	10,98	10,98
21	11,06	11,34	11,06	10,66	10,83	10,66
22	11,05	10,35	10,35	11,04	10,68	10,68
23	11,63	12,07	11,63	11,08	11,87	11,08
24	12,11	11,49	11,49	12,21	11,87	11,87
25	11,24	11,61	11,24	11,33	11,56	11,33
26	11,12	10,83	10,83	11,89	11,63	11,63
27	10,52	11,29	10,52	11,49	11,86	11,49
28	11,21	10,81	10,81	11,23	11,08	11,08
29	11,93	12,18	11,93	11,44	11,71	11,44
30	11,13	10,63	10,63	10,51	10,17	10,17

Tabel 16 : Data mentah menggiring bola

No	Hasil Tes		Terbaik
	I	II	
1	18,72	18,48	18,48
2	20,22	20,34	20,22
3	21,85	21,42	21,42
4	20,32	20,67	20,32
5	24,04	23,85	23,85
6	21,75	22,12	21,75
7	24,78	24,34	24,34
8	19,06	19,41	19,06
9	20,06	19,41	19,41
10	20,36	20,69	20,36
11	19,13	18,85	18,85
12	18,53	19,23	18,53
13	18,51	17,87	17,87
14	19,46	20,11	19,46
15	20,15	19,82	19,82
16	19,73	20,17	19,73
17	20,16	19,49	19,49
18	20,71	21,21	20,71
19	20,11	19,63	19,63
20	20,73	21,12	20,73
21	18,96	19,24	18,96
22	20,15	19,68	19,68
23	19,08	19,65	19,08
24	21,20	20,88	20,88
25	21,2	21,64	21,2
26	21,97	21,63	21,63
27	19,49	20,23	19,49
28	19,21	18,58	18,58
29	19,44	19,73	19,44
30	20,42	20,17	20,17

Lampiran 13**Foto-foto penelitian**

Gambar 16. Pelaksanaan tes dynamic balance



Gambar 17. Pelaksanaan tes kelincahan



Gambar 18. Tes Menggiring Bola