LAMPIRAN - LAMPIRAN

Lampiran 1.

Tabel 8. Daftar Hasil Tes *Medicine Ball Throw* (X_1)

No	Nama	Hasil Tes *Medicine Ball Throw* (dalam meter)
1	Alvin	4,8
2	Zaki	4,6
3	Jerry	4,7
4	Iskandar	5
5	Alim	4,2
6	Budi	4,7
7	Astri	5
8	Airlangga	5,1
9	Idang	4,8
10	Darul	5,2
11	Angga	6,5
12	Fikri	4,8
13	Iqbal	5,3
14	Ginanjar	4,4
15	Sumeda	4
16	Dea	5,1
17	Ulil	4,9
18	Hafiz	4,1
19	Nugroho	5

20	Yogi	3,9
21	Mar'i	4,1
22	Arif	4,7
23	Cendekia	4,4
24	Fahmi	5
25	Fauzur	4,4
26	Rizki	5
27	Enry	5
28	Fazrin	6,1
29	Atep	4
30	Wandi	6,4
Σ		195

Lampiran 2

Tabel 9. Data hasil *sit and reach* (X_2)

No	Nama	Hasil Tes *sit and reach* (dalam centimeter)
1	Alvin	16
2	Zaki	19
3	Jerry	20
4	Iskandar	18
5	Alim	30
6	Budi	18
7	Astri	22
8	Airlangga	21
9	Idang	16
10	Darul	25
11	Angga	12
12	Fikri	20
13	Iqbal	20
14	Ginanjar	23
15	Sumeda	16
16	Dea	20
17	Ulil	17
18	Hafiz	14
19	Nugroho	15
20	Yogi	17
21	Mar'i	17

22	Arif	20
23	Cendekia	18
24	Fahmi	30
25	Fauzur	18
26	Rizki	21
27	Enry	17,5
28	Fazrin	14
29	Atep	21
30	Wandi	16
Σ		572

Lampiran 3

Tabel 10. Daftar Hasil Tes Ketepatan *Reverse Push* Bola Hockey (Y)

No	Nama	Hasil Tes Ketepatan *Reverse Push* Bola Hockey
1	Alvin	4
2	Zaki	5
3	Jerry	2
4	Iskandar	5
5	Alim	3
6	Budi	5
7	Astri	3
8	Airlangga	5
9	Idang	2
10	Darul	6
11	Angga	3
12	Fikri	3
13	Iqbal	3
14	Ginanjar	1
15	Sumeda	3
16	Dea	4
17	Ulil	4
18	Hafiz	4
19	Nugroho	4
20	Yogi	5
21	Mar'i	2

22	Arif	4
23	Cendekia	2
24	Fahmi	3
25	Fauzur	4
26	Rizki	3
27	Enry	3
28	Fazrin	4
29	Atep	1
30	Wandi	2
Σ		102

Lampiran 4

Tabel 11. Daftar Hasil *Medicine Ball Throw* (X_1), Hasil Sit and Reach (X_2) dan Hasil Tes Ketepatan *Reverse Push* Bola Hockey (Y)

No	Nama	X_1	X_2	Y
1	Alvin	14	5	6
2	Zaki	21	24	5
3	Jerry	18	10	8
4	Iskandar	8	14	8
5	Alim	25	7	29
6	Budi	19	8	8
7	Astri	9	26	13
8	Airlangga	6	29	8
9	Idang	16	3	28
10	Darul	5	12	15
11	Angga	1	13	5
12	Fikri	17	16	11
13	Iqbal	4	22	6
14	Ginanjar	22	2	7
15	Sumeda	28	4	5
16	Dea	7	6	10
17	Ulil	15	23	7
18	Hafiz	26	25	4
19	Nugroho	10	27	7

20	Yogi	30	17	5
21	Mar'i	27	20	9
22	Arif	20	21	9
23	Cendekia	23	9	10
24	Fahmi	11	15	4
25	Fauzur	24	30	6
26	Rizki	12	1	4
27	Enry	13	19	8
28	Fazrin	3	18	6
29	Atep	29	28	13
30	Wandi	2	11	9
	Σ	145,2	571,5	102

Lampiran 5

Langkah – langkah Perhitungan Distribusi Frekuensi

A. Variabel (X_1)

Rentang (R) = data terbesar – data terkecil
= 6,5 – 3,9
= 2,6

Banyak Kelas (BK) = 1 + (3,3) log n
= 1 + (3,3) log 30
= 1 + (3,3) 1,47
= 1 + 4,87
= 5,87 (6)

Panjang Kelas (PK) = $\frac{R}{BK}$
= $\frac{2,6}{6}$
= 0,43

B. Variabel (X_2)

Rentang (R) = data terbesar – data terkecil
= 30 – 12
= 18

Banyak Kelas (BK) = 1 + (3,3) log n
= 1 + (3,3) log 30
= 1 + (3,3) 1,47
= 1 + 4,87
= 5,87 (6)

Panjang Kelas (PK) = $\frac{R}{BK}$
= $\frac{18}{6}$
= 3

C. Variabel (Y)

Rentang (R) = data terbesar – data terkecil

= 6 – 1

= 5

Banyak Kelas (BK) = 1 + (3,3) log n

= 1 + (3,3) log 30

= 1 + (3,3) 1,47

= 1 + 4,87

= 5,87 (6)

Panjang Kelas (PK) = $\frac{R}{BK}$

= $\frac{5}{6}$

= 0,85

Lampiran 6

Menghitung Rata-rata, Simpang Baku

A. Variabel (X_1)

Diketahui :

$\sum X_1 = 145,2$

$\sum X_1^2 = 714,68$

$n = 30$

1. Rata – rata X_1 $= \frac{\sum X_1}{n}$

$= \frac{145,2}{30}$

$= 4,84$

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

$= \sqrt{\frac{30(714,68) - (145,2)^2}{30\,(30-1)}}$

$= \sqrt{\frac{21440,4 - 21083,04}{30(29)}}$

$= \sqrt{\frac{357,36}{870}}$

$= \sqrt{0,410}$

$= 0,64$

3. Varians $= 0,410$

B. Variabel (X2)

Diketahui :

$\sum X_2 = 571,5$

$\sum X_2^2 = 11.376,25$

$n = 30$

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

$= \frac{571,5}{30}$

$= 19,05$

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

$= \sqrt{\frac{30(11.376,25) - (571,5)^2}{30(30-1)}}$

$= \sqrt{\frac{341.287,5 - 326.612,25}{30(29)}}$

$= \sqrt{\frac{14675,25}{870}}$

$= \sqrt{16,86}$

$= 4,10$

3. Varians $= 16,86$

C. Variabel Hasil Ketepatan Melewati Rintangan Pertama

Diketahui :

$\sum Y = 102$

$\sum Y^2 = 392$

$n = 30$

1. Rata – rata Y $= \frac{\sum Y}{n}$

$= \frac{102}{30}$

$= 3,4$

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

$$= \sqrt{\frac{30(392) - (102)^2}{30(30-1)}}$$

$$= \sqrt{\frac{11.760 - 10.404}{30(29)}}$$

$$= \sqrt{\frac{1356}{870}}$$

$$= \sqrt{1,55}$$

$$= 1,24$$

3. Varians = 1,55

Lampiran 7

Data Untuk Mencari Persamaan Regresi

Tabel 12. Untuk Mencari Persamaan Regresi

No	X_1	X_2	Y	X_1^2	X_2^2	Y^2	X_1Y	X_2Y	$X_1 X_2$
1	4,8	16	4	23,04	256	16	19,2	64	76,8
2	4,6	19	5	21,16	361	25	23	95	87,4
3	4,7	20	2	22,09	400	4	9,4	40	94
4	5	18	5	25,00	324	25	25	90	90
5	4,2	30	3	17,64	900	9	12,6	90	126
6	4,7	18	5	22,09	324	25	23,5	90	84,6
7	5	22	3	25,00	484	9	15	66	110
8	5,1	21	5	26,01	441	25	25,5	105	107,1
9	4,8	16	2	23,04	256	4	9,6	32	76,8
10	5,2	25	6	27,04	625	36	31,2	150	130
11	6,5	12	3	42,25	144	9	19,5	36	78
12	4,8	20	3	23,04	400	9	14,4	60	96
13	5,3	20	3	28,09	400	9	15,9	60	106
14	4,4	23	1	19,36	529	1	4,4	23	101,2
15	4	16	3	16,00	256	9	12	48	64
16	5,1	20	4	26,01	400	16	20,4	80	102
17	4,9	17	4	24,01	289	16	19,6	68	83,3
18	4,1	14	4	16,81	196	16	16,4	56	57,4
19	5	15	4	25,00	225	16	20	60	75
20	3,9	17	5	15,21	289	25	19,5	85	66,3

21	4,1	17	2	16,81	289	4	8,2	34	69,7
22	4,7	20	4	22,09	400	16	18,8	80	94
23	4,4	18	2	19,36	324	4	8,8	36	79,2
24	5	30	3	25,00	900	9	15	90	150
25	4,4	18	4	19,36	324	16	17,6	72	79,2
26	5	21	3	25,00	441	9	15	63	105
27	5	17,5	3	25,00	306,25	9	15	52,5	87,5
28	6,1	14	4	37,21	196	16	24,4	56	85,4
29	4	21	1	16,00	441	1	4	21	84
30	6,4	16	2	40,96	256	4	12,8	32	102,4
Σ	145,2	571,5	102	714,68	11376,25	392	495,70	1934,50	2748,30

Lampiran 8

Mencari Persamaan Regresi

1. Regresi Y atas X_1

Diketahui :

$\sum X_1 = 145,2$

$\sum X_1^2 = 714,68$

$\sum Y = 102$

$\sum Y^2 = 392$

$\sum X_1 Y = 495,70$

n = 30

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

$= \frac{(102)(714,68) - (145,68)(495,70)}{30(714,68) - (145,2)^2}$

$= \frac{1541,90 - 1517,89}{21.440,4 - 21.083}$

$= \frac{921,72}{357,36}$

$= 2,57$

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

$= \frac{30(495,70) - (145,2)(102)}{30(714,68) - (145,2)^2}$

$= \frac{14.871 - 14.810,4}{21.440,4 - 21.083}$

$$= \frac{60,6}{357,36}$$

= 0,16

Jadi persamaan Regresi Y terhadap X_1 adalah $\tilde{Y}$ = 2,57 + 0,16 X_1

2. Regresi Y atas X_2

Diketahui :

$\sum X_2$	= 571,5	$\sum Y$	= 102
$\sum X_2^2$	= 11.376,25	$\sum Y^2$	= 392
$\sum X_2 Y$	= 1934,50	n	= 30

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

$$= \frac{(102)(11376,25) - (571,5)(1934,50)}{30(11.376,25) - (571,5)^2}$$

$$= \frac{1160378 - 1105567}{341.287,5 - 326.612,3}$$

$$= \frac{54.810,75}{14.675,25}$$

= 3,73

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

$$= \frac{30(1934,50) - (571,5)(102)}{30(11.376,25) - (571,5)^2}$$

$$= \frac{58.035 - 58.293}{341.287,5 - 326.612,3}$$

$$= \frac{-258}{14675,25}$$

= -0,017

Jadi persamaan Regresi Y terhadap X_2 adalah $\tilde{Y}$ = 3,73 + (-0,017) X_2

3. Regresi ganda Y atas X_1 dan X_2

Dicari dengan rumus sebagai berikut :

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

$$b_1 = \frac{(\sum X_2^2)(\sum X_1 Y) - (\sum X_1 X_2)(\sum X_2 Y)}{(\sum X_1^2)(\sum X_2^2) - (\sum X_1 X_2)^2}$$

$$b_2 = \frac{(\sum X_1^2)(\sum X_2 Y) - (\sum X_1 X_2)(\sum X_1 Y)}{(\sum X_1^2)(\sum X_2^2) - (\sum X_1 X_2)^2}$$

Dimana :

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

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

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

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

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

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

Diketahui:

$\sum X_1 = 145{,}2$

$\sum X_2 = 571{,}5$

$\sum Y = 102$

$\sum X_1^2 = 714{,}68$

$\sum X_2^2 = 11376{,}25$

$\sum Y^2 = 392$

$\sum X_1 Y = 495{,}70$

$\sum X_2 Y = 1934{,}50$

$\sum X_1 X_2 = 2748{,}30$

Jadi :

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

$$= 392 - \frac{(102)^2}{30}$$

$$= 392 - 346{,}8$$

$$= 45{,}20$$

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

$$= 714{,}68 - \frac{(145{,}2)^2}{30}$$

$$= 714{,}68 - 702{,}76$$

$$= 11{,}91$$

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

$$= 11736{,}25 - \frac{(571{,}5)^2}{30}$$

$$= 11736{,}25 - 10887{,}07$$

$$= 489{,}17$$

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

$$= 495{,}70 - \frac{(145{,}2)(102)}{30}$$

$$= 495{,}70 - 493{,}68$$

$$= 2{,}02$$

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

$$= 1934{,}50 - \frac{(571{,}5)(102)}{30}$$

$$= 1934{,}50 - 1943{,}1$$

$$= -8{,}60$$

$$\sum X_1X_2 = \sum X_1X_2 - \frac{(\sum X_1)(\sum X_2)}{n}$$

$$= 2748{,}30 - \frac{(145{,}2)(571{,}5)}{30}$$

$$= 2748{,}30 - 2766{,}06$$

$$= -17{,}76$$

Dengan angka di atas dan dimasukan ke dalam rumus;

$$b_1 = \frac{(\sum X_2^2)(\sum X_1Y) - (\sum X_1X_2)(\sum X_2Y)}{(\sum X_1^2)(\sum X_2^2) - (\sum X_1X_2)^2}$$

$$= \frac{(489{,}17)(2{,}02) - (-17{,}76)(-8{,}60)}{(11{,}91)(489{,}17) - (-17{,}76)2}$$

$$= \frac{(988{,}13) - (152{,}73)}{5827{,}05 - 315{,}42}$$

$$= \frac{835{,}39}{5511{,}63}$$

$$= 0{,}15$$

$b_2 = \frac{(\sum X_1^2)(\sum X_2 Y) - (\sum X_1 X_2)(\sum X_1 Y)}{(\sum X_1^2)(\sum X_2^2) - (\sum X_1 X_2)^2}$

$= \frac{(0{,}53)(0{,}18) - (-0{,}16)(-0{,}27)}{(11{,}91)(489{,}17) - (-17{,}76)2}$

$= \frac{(-102{,}44) - (-35{,}87)}{5827{,}05 - 315{,}42}$

$= \frac{-66{,}56}{5511{,}63}$

$= -0{,}012$

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

$= 3{,}4 - (0{,}15)(4{,}84) - (-0{,}012)(19{,}05)$

$= 3{,}4 - 0{,}726 - (-0{,}304)$

$= 2{,}98$

Jadi persamaan Regresi Ganda Y atas X_1 dan X_2 adalah

$\tilde{Y} = 2{,}97 + 0{,}15X_1 + (-0{,}304)X_2$

Lampiran 9

Mencari Koefisien Korelasi dan Uji Keberartian Koefisien Korelasi

1. Koefisien Korelasi *ry* $_1$

r $= \frac{n(\sum X_1 Y) - (\sum X_1)(\sum Y)}{\sqrt{[n(\sum X_1^2) - (\sum X_1)^2][n(\sum Y^2) - (\sum Y)^2]}}$

$= \frac{30(495{,}70) - (145{,}2)(102)}{\sqrt{[30(714{,}68) - (145{,}2)^2][30(392) - (102)^2]}}$

$= \frac{14871 - 14810}{\sqrt{(21440) - (21083{,}04)(11760) - (10404)}}$

$= \frac{60{,}6}{\sqrt{357{,}36)(1356)}}$

$= \frac{60{,}6}{\sqrt{484580{,}2}}$

$= \frac{60{,}6}{696{,}11}$

$= 0{,}087$

2. Uji Keberartian Koefisien Korelasi

t $= \frac{r\sqrt{n-2}}{\sqrt{1-r^2}}$

$= \frac{0{,}08\sqrt{30-2}}{\sqrt{1-(0{,}08)^2}}$

$= \frac{0{,}423}{\sqrt{1-0{,}0064}}$

$= \frac{0{,}423}{\sqrt{0{,}99}}$

$$= \frac{0{,}423}{0{,}996}$$

$$= 0{,}424$$

tabel dk = n – 2

= 30 – 2

= 28

Berarti :

t_{tabel} dengan α = 0,05 dan dk = 28 diperoleh tabel sebesar 1,701, karena t_{hitung} = 0,424 > t_{tabel} 1,701 dengan demikian kita tolak Ho, berarti koefisien korelasi 0,08 adalah signifikan.

3. Koefisien Korelasi ry_2

$$r = \frac{n(\sum X_2 Y) - (\sum X_2)(\sum Y)}{\sqrt{[n(\sum X_2^2) - (\sum X_2)^2][n(\sum Y^2) - (\sum Y)^2]}}$$

$$= \frac{30\,(1934{,}50) - (571{,}5)(102)}{\sqrt{[30(11376{,}25) - (571{,}5)^2][30(392) - (102)^2]}}$$

$$= \frac{58035 - 58293}{\sqrt{(341288 - 326612)(11760 - 10404)}}$$

$$= \frac{-258}{\sqrt{14675{,}25 - 1356}}$$

$$= \frac{-258}{\sqrt{13319{,}25}}$$

$$= \frac{-258}{115{,}40}$$

$$= 2{,}23$$

4. Uji Keberartian Koefisien Korelasi

$$t = \frac{r\sqrt{n-2}}{\sqrt{1-r^2}}$$

$$= \frac{2{,}23\sqrt{30-2}}{\sqrt{1-2{,}23^2}}$$

$$= \frac{11{,}82}{\sqrt{4{,}99}}$$

$$= \frac{11{,}82}{2{,}23}$$

= 5,30

tabel dk = n – 2

= 30 – 2

= 28

Berarti:

dengan α = 0,05 dan dk = 28 diperoleh tabel sebesar 1,701 karena t_{hitung} = 5,30 > t_{tabel} = 1,701 dengan demikian kita terima Ho berarti koefisien korelasi 2,23 adalah tidak signifikan.

5. Mencari $ry_{1\text{-}2}$ (Koefisien Korelasi Ganda)

Jk (Reg) = $b_1 \sum x_1 y + b_2 \sum x_2 y$

= (0,15) (495,70) + (-0,012) (1934,50)

= 75,13 + (-23,36)

= 51,76

R = $\frac{\sqrt{Jk\,(Reg)}}{\sum y^2}$

= $\frac{\sqrt{(51{,}76)}}{392}$

= $\sqrt{0{,}13}$

= 0,36

6. Uji Keberartian Koefisien Korelasi Ganda

$$FH = \frac{r^2 : K}{(1-r^2) : n-k-1}$$

$$= \frac{(0{,}36)^2 : 2}{(1-0{,}36^2) : 30-2-1}$$

$$= \frac{0{,}31 : 2}{0{,}63 : 27}$$

$$= \frac{0{,}06}{0{,}023}$$

$$= 2{,}80$$

F_{tabel} dicari dengan cara melihat daftar distribusi F dengan cacah predictor = 2 sebagai pembilang dan (n-k-1) = 27 sebagai penyebut didapat F_{hitung} = 2,80 < F_{tabel} = 3,32 maka koefisien korelasi ganda $Ry_{1\text{-}2}$ = 0,36 adalah signifikan.

DAFTAR GAMBAR

Gambar 7: Doa Bersama Sebelum Melakukan Penelitian

Sumber : Dokumentasi Pribadi

Gambar 8: Pengarahan Sebelum Melakukan Penelitian

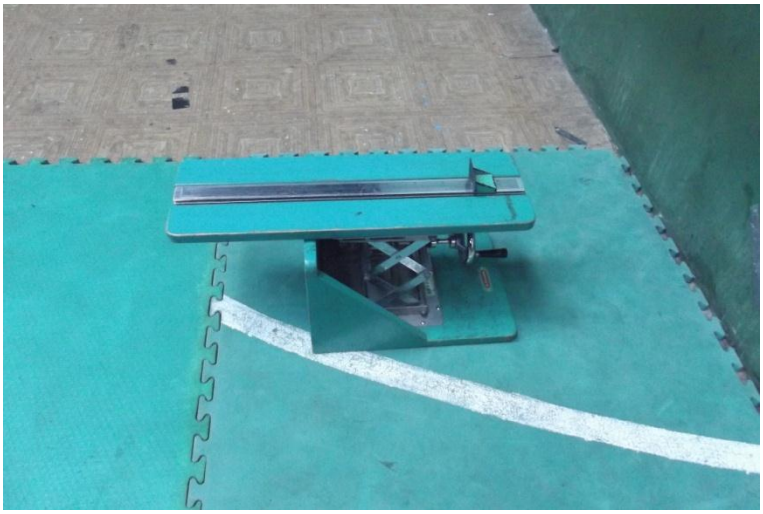
Sumber : Dokumentasi Pribadi

Gambar Alat Ukur Pada Tes *Medicine Ball Throw*

Sumber : Dokumentasi Pribadi

Gambar 9: Bola *Medicine*

Sumber : Dokumentasi Pribadi



Gambar 10: Alat Pengukur Kelentukan Otot Punggung (*sit and reach*)

Sumber : Dokumentasi Pribadi

Gambar 11: Pengambilan Data Tes *Medicine Ball Throw*

Sumber : Dokumentasi Pribadi

Gambar 12: Pengambilan Data Tes *Sit and Reach*

Sumber : Dokumentasi Pribadi

Gambar 13: Pengambilan Data Ketepatan *Reverse Push*

Sumber : Dokumentasi Pribadi