

## Lampiran 1

Tabel 5. Deskripsi Data

Hasil Tes awal Kelompok X (Latihan Umpan Tembok)

No.	X	X <sup>2</sup>
1	10	100
2	11	121
3	17	289
4	13	169
5	15	225
6	16	256
7	18	324
8	20	400
9	20	400
Total	140	2284

Rata-rata

$$\begin{aligned}\bar{X} &= \frac{\sum X}{n} \\ &= \frac{140}{9} = 15,555\end{aligned}$$

$$\begin{aligned}S^2 &= \frac{n \cdot \sum X^2 - (\sum X)^2}{n \cdot (n-1)} & S &= \sqrt{S^2} \\ &= \frac{9 \cdot 2284 - (140)^2}{9 \cdot (9-1)} & &= \sqrt{0,013} \\ &= \frac{20,556 - 19,600}{72} & &= 0,114 \\ &= \frac{0,956}{72} = 0,013\end{aligned}$$

**Lampiran 2**

Tabel 6. Distribusi Frekuensi

Menentukan rentang (R)

$$\begin{aligned} R &= \text{Max} - \text{Min} \\ &= 20 - 10 \\ &= 10 \end{aligned}$$

Menentukan Banyaknya kelas (K)

$$\begin{aligned} K &= 1 + 3,3 (\log n) \\ &= 1 + 3,3 (\log 9) \\ &= 1 + 3,135 \\ &= 4,135 = 4 \end{aligned}$$

Panjang kelas (P)

$$P = \frac{R}{K} = \frac{10}{4} = 2,50$$

No.	Interval	Titik Tengah	Frekuensi Absolut	Frekuensi Relatif
1	10 – 12	11	2	22,2 %
2	13 – 15	14	2	22,2 %
3	16 – 18	17	3	33,3 %
4	19 – 21	20	2	22,2 %
	Total		9	100 %

**Lampiran 3.**

Tabel 7. Deskripsi Data.

Hasil Tes Akhir Kelompok X (Latihan Umpan Tembok)

No.	X	X <sup>2</sup>
1	15	225
2	12	144
3	18	324
4	18	324
5	18	324
6	18	324
7	21	441
8	21	441
9	23	529
Total	164	3076

Rata-rata

$$\begin{aligned}\bar{X} &= \frac{\sum X}{n} \\ &= \frac{164}{9} = 18,22\end{aligned}$$

$$\begin{aligned}S^2 &= \frac{n \cdot \sum X^2 - (\sum X)^2}{n \cdot (n-1)} & S &= \sqrt{S^2} \\ &= \frac{9 \cdot 3076 - (164)^2}{9 \cdot (9-1)} & &= \sqrt{0,010} \\ &= \frac{27,684 - 26,896}{72} & &= 0,1 \\ &= \frac{0,788}{72} = 0,010\end{aligned}$$

**Lampiran 4**

Tabel 8. Distribusi Frekuensi

Menentukan rentang (R)

$$\begin{aligned} R &= \text{Max} - \text{Min} \\ &= 23 - 12 \\ &= 11 \end{aligned}$$

Menentukan Banyaknya kelas (K)

$$\begin{aligned} K &= 1 + 3,3 (\log n) \\ &= 1 + 3,3 (\log 9) \\ &= 1 + 3,135 \\ &= 4,135 = 4 \end{aligned}$$

Panjang kelas (P)

$$P = \frac{R}{K} = \frac{11}{4} = 2,72$$

No.	Interval	Titik Tengah	Frekuensi Absolut	Frekuensi Relatif
1	12 – 14	13	1	11,1 %
2	15 – 17	16	1	11,1 %
3	18 – 20	19	4	44,4 %
4	21 – 23	22	3	33,3 %
	Total		9	100 %

## Lampiran 5

Tabel 9. Distribusi Data  
 Hasil Tes Awal Kelompok Y (Latihan Umpan *Passing Individu*)

No.	Y	Y <sup>2</sup>
1	7	49
2	8	64
3	9	81
4	9	81
5	10	100
6	14	196
7	11	121
8	10	100
9	18	324
Total	96	1116

Rata-rata

$$\begin{aligned}\bar{Y} &= \frac{\Sigma Y}{n} \\ &= \frac{96}{9} = 10,67\end{aligned}$$

$$\begin{aligned}S^2 &= \frac{n \cdot \Sigma Y^2 - (\Sigma Y)^2}{n \cdot (n-1)} & S &= \sqrt{S^2} \\ &= \frac{9 \cdot 1116 - (96)^2}{9 \cdot (9-1)} & &= \sqrt{0,011} \\ &= \frac{10,044 - 9,216}{72} & &= 0,104 \\ &= \frac{0,828}{72} = 0,011\end{aligned}$$

**Lampiran 6**

Tabel 10. Distribusi Frekuensi

Menentukan rentang (R)

$$\begin{aligned} R &= \text{Max} - \text{Min} \\ &= 18 - 7 \\ &= 11 \end{aligned}$$

Menentukan Banyaknya kelas (K)

$$\begin{aligned} K &= 1 + 3,3 (\log n) \\ &= 1 + 3,3 (\log 9) \\ &= 1 + 3,135 \\ &= 4,135 = 4 \end{aligned}$$

Panjang kelas (P)

$$P = \frac{R}{K} = \frac{11}{4} = 2,75$$

No.	Interval	Titik Tengah	Frekuensi Absolut	Frekuensi Relatif
1	7 – 9	8	4	44,4 %
2	10 – 12	11	3	33,3 %
3	13 – 15	14	1	11,1 %
4	16 – 18	17	1	11,1 %
	Total		9	100 %

## Lampiran 7

Tabel 11. Distribusi Data  
 Hasil Tes Akhir Kelompok Y (Latihan Umpan *Passing Individu*)

No.	Y	Y <sup>2</sup>
1	8	64
2	9	81
3	10	100
4	8	64
5	11	121
6	14	196
7	11	121
8	12	144
9	18	324
Total	101	1215

Rata-rata

$$\begin{aligned}\bar{Y} &= \frac{\sum Y}{n} \\ &= \frac{101}{9} = 11,22\end{aligned}$$

$$\begin{aligned}S^2 &= \frac{n \cdot \sum Y^2 - (\sum Y)^2}{n \cdot (n-1)} & S &= \sqrt{S^2} \\ &= \frac{9 \cdot 1215 - (101)^2}{9 \cdot (9-1)} & &= \sqrt{0,010} \\ &= \frac{10,935 - 10,201}{72} & &= 0,1 \\ &= \frac{0,734}{72} = 0,010\end{aligned}$$

**Lampiran 8**

Tabel 12. Distribusi Frekuensi

Menentukan rentang (R)

$$\begin{aligned} R &= \text{Max} - \text{Min} \\ &= 18 - 8 \\ &= 10 \end{aligned}$$

Menentukan Banyaknya kelas (K)

$$\begin{aligned} K &= 1 + 3,3 (\log n) \\ &= 1 + 3,3 (\log 9) \\ &= 1 + 3,135 \\ &= 4,135 = 4 \end{aligned}$$

Panjang kelas (P)

$$P = \frac{R}{K} = \frac{10}{4} = 2,5$$

No.	Interval	Titik Tengah	Frekuensi Absolut	Frekuensi Relatif
1	8 – 10	9	4	44,4
2	11 – 13	12	3	33,3
3	14 – 16	15	1	11,1
4	17 – 19	18	1	11,1
	Total		9	100



### Lampiran 9

Tabel 13. Perhitungan Uji-t Paired (Latihan Umpan tembok)

NO	AWAL X1	AKHIR X2	D (X2 - X1)	D <sup>2</sup>
1	10	15	5	25
2	11	12	1	1
3	17	18	1	1
4	13	18	5	25
5	15	18	3	9
6	16	18	2	4
7	18	21	3	9
8	20	21	1	1
9	20	23	3	9
JUMLAH	140	164	24	84

Diketahui :

$$\Sigma D = 24$$

$$\Sigma D^2 = 84$$

Dicari

$$M_D = \frac{\Sigma D}{n} = \frac{24}{9} = 2,666$$

$$\begin{aligned} S_{dD} &= \sqrt{\frac{\Sigma D^2}{n} - \left(\frac{\Sigma D}{n}\right)^2} \\ &= \sqrt{\frac{84}{9} - \left(\frac{24}{9}\right)^2} \\ &= \sqrt{9,333 - 2,666^2} = \sqrt{2,226} = 1,491 \end{aligned}$$

$$\begin{aligned}
 SE_{MD} &= \frac{SD_D}{\sqrt{n-1}} \\
 &= \frac{1,491}{\sqrt{9-1}} \\
 &= \frac{1,491}{2,828} \\
 &= 0,527
 \end{aligned}$$

$$\begin{aligned}
 t_0 &= \frac{M_D}{SE_{MD}} \\
 &= \frac{2,666}{0,527} \\
 &= 5,058
 \end{aligned}$$

Mencari  $t_{tabel}$  :

$$\begin{aligned}
 &= (\alpha ; n-1) \\
 &= (0,05 ; 8) \\
 &= 2,306
 \end{aligned}$$

Dari data tersebut diperoleh  $t_{hitung}$  sebesar 5,058  $t_{tabel}$  dengan uji satu sisi pada taraf signifikan 0,05 dengan  $n-1 = 8$  adalah 2,306 maka  $t_{hitung} (5,058) > t_{tabel} (2,306)$ , berarti terjadi peningkatan yang signifikan antara latihan umpan tembok tes awal dan tes akhir.

### Lampiran 10

Tabel 14. Perhitungan Uji-t Paired (latihan umpan *passing* individu)

NO	AWAL Y1	AKHIR Y2	D (Y2 - Y1)	D <sup>2</sup>
1	7	8	1	1
2	8	9	1	1
3	9	10	1	1
4	9	8	-1	1
5	10	11	1	1
6	14	14	0	0
7	11	11	0	0
8	10	12	2	4
9	18	18	0	0
JUMLAH	96	101	5	9

Diketahui :

$$\Sigma D = 5$$

$$\Sigma D^2 = 9$$

Dicari

$$M_D = \frac{\Sigma D}{n} = \frac{5}{9} = 0,555$$

$$S_{D^2} = \sqrt{\frac{\Sigma D^2}{n} - \left(\frac{\Sigma D}{n}\right)^2}$$

$$= \sqrt{\frac{9}{9} - \left(\frac{5}{9}\right)^2}$$

$$= \sqrt{1 - 0,308^2} = \sqrt{0,692} = 0,831$$

$$\begin{aligned}
 SE_{MD} &= \frac{SD_D}{\sqrt{n-1}} \\
 &= \frac{0,831}{\sqrt{9-1}} \\
 &= \frac{0,831}{2,828} \\
 &= 0,294
 \end{aligned}$$

$$\begin{aligned}
 t_0 &= \frac{M_D}{SE_{MD}} \\
 &= \frac{0,555}{0,294} \\
 &= 1,887
 \end{aligned}$$

Mencari  $t_{tabel}$  :

$$\begin{aligned}
 &= (\alpha ; n-1) \\
 &= (0,05 ; 8) \\
 &= 2,306
 \end{aligned}$$

Dari data tersebut diperoleh  $t_{hitung}$  sebesar 1,887  $t_{tabel}$  dengan uji satu sisi pada taraf signifikan 0,05 dengan  $n-1 = 8$  adalah 2,306 maka  $t_{hitung}$  (1,887)  $< t_{tabel}$  (2,306), berarti tidak terjadi peningkatan yang signifikan antara latihan umpan *passing* individu tes awal dan tes akhir.

## Lampiran 11

Tabel 15. Perhitungan Uji-t Independent  
(perbandingan umpan tembok dengan umpan *passing* individu)

NO	X	Y	X <sup>2</sup>	Y <sup>2</sup>
1	15	8	225	64
2	12	9	144	81
3	18	10	324	100
4	18	8	324	64
5	18	11	324	121
6	18	14	324	196
7	21	11	441	121
8	21	12	441	144
9	23	18	529	324
Jumlah	164	101	3076	1215

Diketahui

$$n_x = 9$$

$$n_y = 9$$

$$\Sigma X = 164$$

$$\Sigma Y = 101$$

Dicari :

$$\begin{aligned} \bar{X} &= \frac{\Sigma X}{n} \\ &= \frac{164}{9} = 18,22 \end{aligned}$$

$$S^2 = \frac{n \cdot \Sigma X^2 - (\Sigma X)^2}{n \cdot (n-1)}$$

$$\begin{aligned}
 &= \frac{9 \cdot 164^2 - (164)^2}{9 \cdot (9-1)} \\
 &= \frac{242,064 - 26,896}{72} \\
 &= 3,361
 \end{aligned}$$

$$\begin{aligned}
 \bar{Y} &= \frac{\Sigma Y}{n} \\
 &= \frac{101}{9} = 11,22
 \end{aligned}$$

$$\begin{aligned}
 S^2 &= \frac{n \cdot \Sigma Y^2 - (\Sigma Y)^2}{n \cdot (n-1)} \\
 &= \frac{9 \cdot 101^2 - (101)^2}{9 \cdot (9-1)} \\
 &= \frac{91,809 - 10,201}{72} \\
 &= \frac{81,608}{72} = 1,133
 \end{aligned}$$

#### Varians Gabungan

$$\begin{aligned}
 S^2_{\text{gab}} &= \frac{(n_x - 1)S_x^2 + (n_y - 1)S_y^2}{n_x + n_y - 2} \\
 &= \frac{(9-1)3,361^2 + (9-1)1,133^2}{9+9-2} \\
 &= \frac{8.11,296 + 8.1,283}{16} \\
 &= \frac{90,368 + 10,264}{16} \\
 &= \frac{100,632}{16} = 6,289 \\
 S &= \sqrt{6,289}
 \end{aligned}$$

$$= 2,507$$

$$\begin{aligned}
 t_0 &= \frac{\bar{X} - \bar{Y}}{s \sqrt{\frac{1}{n_x} + \frac{1}{n_y}}} \\
 &= \frac{18,22 - 11,22}{2,507 \sqrt{\frac{1}{9} + \frac{1}{9}}} \\
 &= \frac{7}{2,507 \times 0,33} \\
 &= \frac{7}{0,827} \\
 &= 8,464
 \end{aligned}$$

Mencari  $t_{\text{tabel}}$  :

$$\begin{aligned}
 &= (\frac{1}{2} \alpha ; n-2) \\
 &= (0,05 ; 7) \\
 &= 2,571
 \end{aligned}$$

Dari data tersebut diperoleh  $t_{\text{hitung}}$  sebesar 8,464  $t_{\text{tabel}}$  dengan taraf signifikan 0,05 dengan df  $(n-2) = 7$  adalah 2,571 maka  $t_{\text{hitung}} (8,464) > t_{\text{tabel}} (2,571)$ , berarti terdapat perbedaan yang signifikan antara latihan umpan tembok dengan latihan umpan *passing* individu

## Lampiran 12

Tabel 16. Uji Reliabilitas

No.	X	Y	X <sup>2</sup>	Y <sup>2</sup>	XY
1	10	15	100	225	150
2	11	12	121	144	132
3	17	18	289	324	306
4	13	18	169	324	234
5	15	18	225	324	270
6	16	18	256	324	288
7	18	21	324	441	378
8	20	21	400	441	420
9	20	23	400	529	460
Jumlah	140	164	2284	3076	2638

Diketahui :

$$N : 9$$

$$\Sigma X : 140$$

$$\Sigma Y : 164$$

$$\Sigma X^2 : 2284$$

$$\Sigma Y^2 : 3076$$

$$\Sigma XY : 2638$$

$$\begin{aligned}
 r &= \frac{n \cdot \Sigma XY - (\Sigma X)(\Sigma Y)}{\sqrt{\{n \cdot \Sigma X^2 - (\Sigma X)^2\} \{n \cdot \Sigma Y^2 - (\Sigma Y)^2\}}} \\
 &= \frac{9 \cdot 2638 - (140)(164)}{\sqrt{\{9 \cdot 2284 - (140)^2\} \{9 \cdot 3076 - (164)^2\}}} \\
 &= \frac{(23,742 - 22,960)}{\sqrt{(20,556 - 19,600)(27,684 - 26,896)}}
 \end{aligned}$$



$$\begin{aligned} &= \frac{(0,782)}{\sqrt{(0,956)(0,788)}} \\ &= \frac{0,782}{0,753} \\ &= 1,038 \end{aligned}$$

Jika r table dengan  $\alpha = 0,05$  dan  $n = 9$  diperoleh nilai 0,632 maka rhitung (1,038) > r table (0,632). Dengan demikian data dinyatakan reliabel.