

## ANALISIS DESKRIPTIF DAN INFERENSIAL SPSS

### A. Analisis Deskriptif

#### *Pretest, Posttest dan Gain*

		Statistics		
		pretest	posttest	gain
N	Valid	34	34	34
	Missing	0	0	0
Mean		36.8824	84.0294	.7441
Std. Error of Mean		2.96887	1.38716	.01925
Median		39.5000	85.0000	.7450
Mode		25.00 <sup>a</sup>	75.00 <sup>a</sup>	.71
Std. Deviation		1.73113E1	8.08847	.11223
Variance		299.683	65.423	.013
Skewness		-.033	-.027	-1.263
Std. Error of Skewness		.403	.403	.403
Kurtosis		-1.250	-1.206	4.558
Std. Error of Kurtosis		.788	.788	.788
Range		55.00	28.00	.62
Minimum		10.00	70.00	.33
Maximum		65.00	98.00	.95
Sum		1254.00	2857.00	25.30
Percentiles	25	20.0000	76.7500	.6950
	50	39.5000	85.0000	.7450
	75	50.2500	91.2500	.8250

a. Multiple modes exist. The smallest value is shown

**Pretest**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	10	2	5.9	5.9	5.9
	13	2	5.9	5.9	11.8
	15	2	5.9	5.9	17.6
	17	1	2.9	2.9	20.6
	20	2	5.9	5.9	26.5
	25	4	11.8	11.8	38.2
	35	1	2.9	2.9	41.2
	36	1	2.9	2.9	44.1
	37	1	2.9	2.9	47.1
	39	1	2.9	2.9	50.0
	40	4	11.8	11.8	61.8
	44	1	2.9	2.9	64.7
	48	1	2.9	2.9	67.6
	50	3	8.8	8.8	76.5
	51	1	2.9	2.9	79.4
	55	1	2.9	2.9	82.4
	56	1	2.9	2.9	85.3
	60	3	8.8	8.8	94.1
	65	2	5.9	5.9	100.0
	Total	34	100.0	100.0	

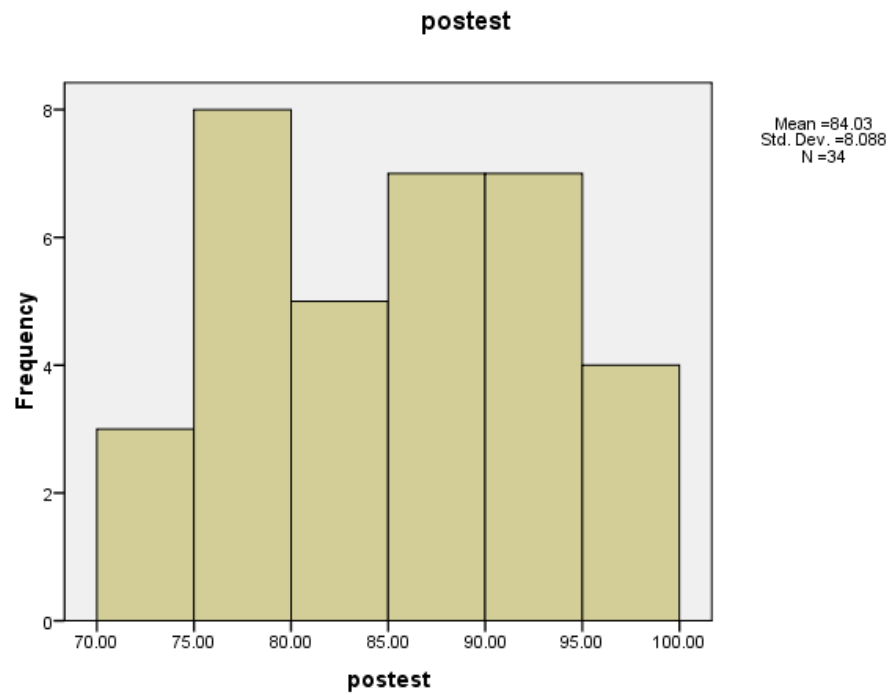
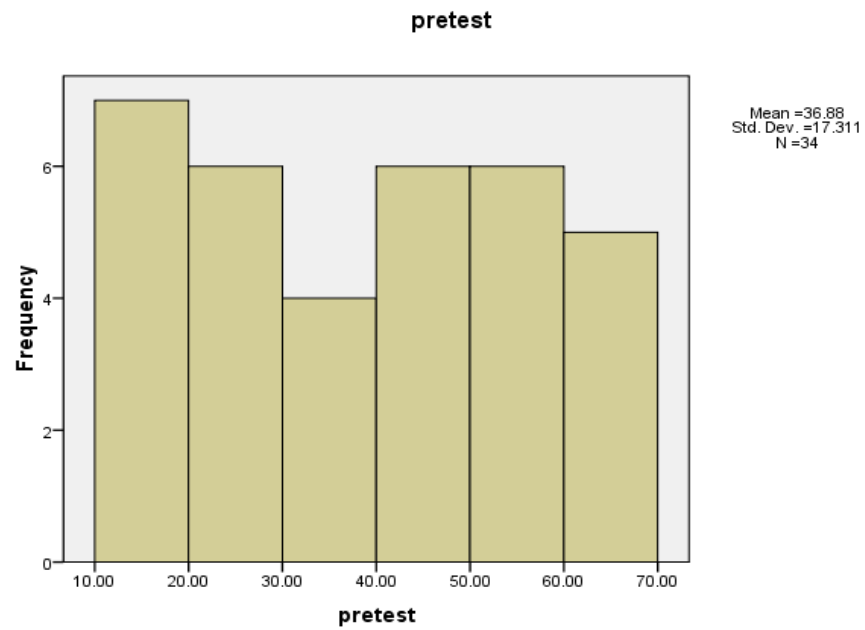
**Posttest**

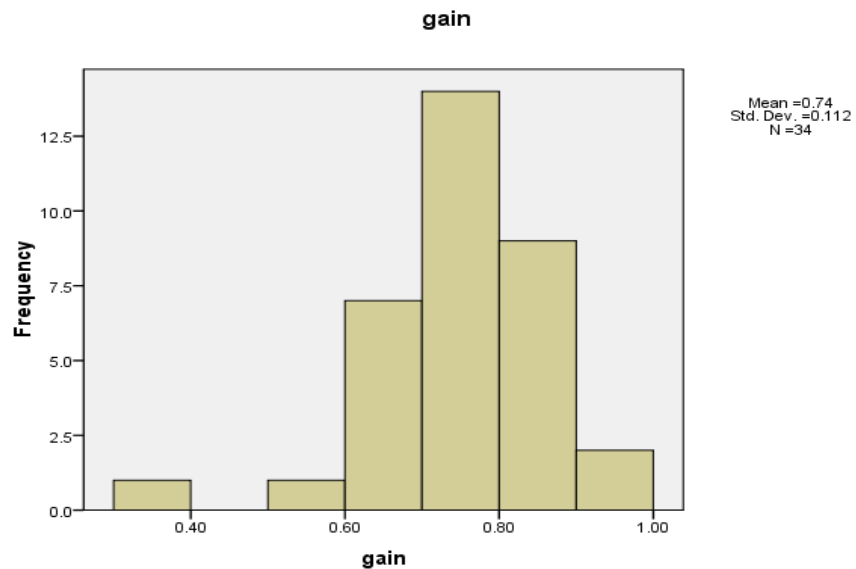
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	70	1	2.9	2.9	2.9
	71	1	2.9	2.9	5.9
	72	1	2.9	2.9	8.8
	75	4	11.8	11.8	20.6
	76	1	2.9	2.9	23.5
	77	2	5.9	5.9	29.4
	79	1	2.9	2.9	32.4
	80	4	11.8	11.8	44.1
	82	1	2.9	2.9	47.1
	85	2	5.9	5.9	52.9
	87	3	8.8	8.8	61.8
	88	1	2.9	2.9	64.7
	89	1	2.9	2.9	67.6
	90	2	5.9	5.9	73.5
	91	1	2.9	2.9	76.5
	92	3	8.8	8.8	85.3
	93	1	2.9	2.9	88.2
	95	2	5.9	5.9	94.1
	97	1	2.9	2.9	97.1
	98	1	2.9	2.9	100.0
Total		34	100.0	100.0	

**Gain**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	0.33	1	2.9	2.9	2.9
	0.6	1	2.9	2.9	5.9
	0.61	1	2.9	2.9	8.8
	0.65	1	2.9	2.9	11.8
	0.66	2	5.9	5.9	17.6
	0.67	1	2.9	2.9	20.6
	0.68	1	2.9	2.9	23.5
	0.7	1	2.9	2.9	26.5
	0.71	4	11.8	11.8	38.2
	0.72	2	5.9	5.9	44.1
	0.73	1	2.9	2.9	47.1
	0.74	1	2.9	2.9	50.0
	0.75	3	8.8	8.8	58.8
	0.76	1	2.9	2.9	61.8
	0.77	1	2.9	2.9	64.7
	0.78	1	2.9	2.9	67.6
	0.8	2	5.9	5.9	73.5
	0.82	1	2.9	2.9	76.5
	0.84	1	2.9	2.9	79.4
	0.85	3	8.8	8.8	88.2
	0.87	1	2.9	2.9	91.2
	0.88	1	2.9	2.9	94.1
	0.92	1	2.9	2.9	97.1
	0.95	1	2.9	2.9	100.0
Total		34	100.0	100.0	

## Histogram





## B. Analisis Inferensial

### 1. Uji Normalitas

**Case Processing Summary**

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Pretest	34	100.0%	0	.0%	34	100.0%
Posttest	34	100.0%	0	.0%	34	100.0%
Gain	34	100.0%	0	.0%	34	100.0%

**Tests of Normality**

	Kolmogorov-Smirnov <sup>a</sup>			Shapiro-Wilk		
	Statistic	Df	Sig.	Statistic	df	Sig.
Pretest	.136	34	.112	.939	34	.057
Posttest	.132	34	.142	.952	34	.143
Gain	.116	34	.200 <sup>*</sup>	.907	34	.007

a. Lilliefors Significance Correction

\*. This is a lower bound of the true significance.

## 2. Uji t

**One-Sample Test**

	Test Value = 74.9					
	T	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
Pretest	-12.805	33	.000	-38.01765	-44.0579	-31.9774
Posttest	6.581	33	.000	9.12941	6.3072	11.9516

**One-Sample Test**

	Test Value = 0.29					
	T	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
Gain	23.595	33	.000	.45412	.4150	.4933

### a. Uji Gain

$$\begin{aligned}
 N_g &= \frac{\text{skor posttest} - \text{skor pretest}}{\text{skor maksimal} - \text{skor pretest}} \\
 &= \frac{84,03 - 36,89}{100 - 36,89} \\
 &= \frac{47,14}{63,12} \\
 &= 0,74
 \end{aligned}$$

### b. Uji Proporsi

$$\begin{aligned}
 Z_{hit} &= \frac{\frac{x}{n} - \pi_0}{\sqrt{\frac{\pi_0 (1 - \pi_0)}{n}}} \\
 &= \frac{\frac{31}{34} - 0.79}{\sqrt{\frac{0.79 (1 - 0.79)}{34}}} \\
 &= \frac{0.91 - 0.79}{\sqrt{\frac{0.79 (0.21)}{34}}}
 \end{aligned}$$

$$= \frac{0.12}{\sqrt{\frac{0.16}{34}}}$$

$$= \frac{0.12}{\sqrt{0.005}}$$

$$= \frac{0.12}{0.07}$$

$$= 1.71$$