

ANALISIS DESKRIPTIF DAN INFERENSIAL

PENDEKATAN PROBLEM POSING

1. ANALISIS DESKRIPTIF

Statistics				
		Pretest	Posttest	Gain
N	Valid	25	25	25
	Missing	0	0	0
Mean		76.40	84.000000	6.836000
Std. Error of Mean		1.948	1.7431487	3.0002669
Median		76.88 ^a	84.415584 ^a	6.572727 ^a
Mode		65 ^b	95.4545	.5136 ^b
Std. Deviation		9.738	8.7157436	15.0013344
Variance		94.833	75.964	225.040
Skewness		-.135	-.140	.349
Std. Error of Skewness		.464	.464	.464
Kurtosis		-1.173	-1.274	-.747
Std. Error of Kurtosis		.902	.902	.902
Range		30	27.2727	53.0273
Minimum		60	68.1818	-18.1727
Maximum		90	95.4545	34.8545
Sum		1910	2100.0000	170.9000

Pretest				
	Frequency	Percent	Valid Percent	Cumulative Percent
60	2	8.0	8.0	8.0
65	4	16.0	16.0	24.0
70	3	12.0	12.0	36.0
75	4	16.0	16.0	52.0
80	4	16.0	16.0	68.0
85	4	16.0	16.0	84.0
90	4	16.0	16.0	100.0
Total	25	100.0	100.0	

Posttest

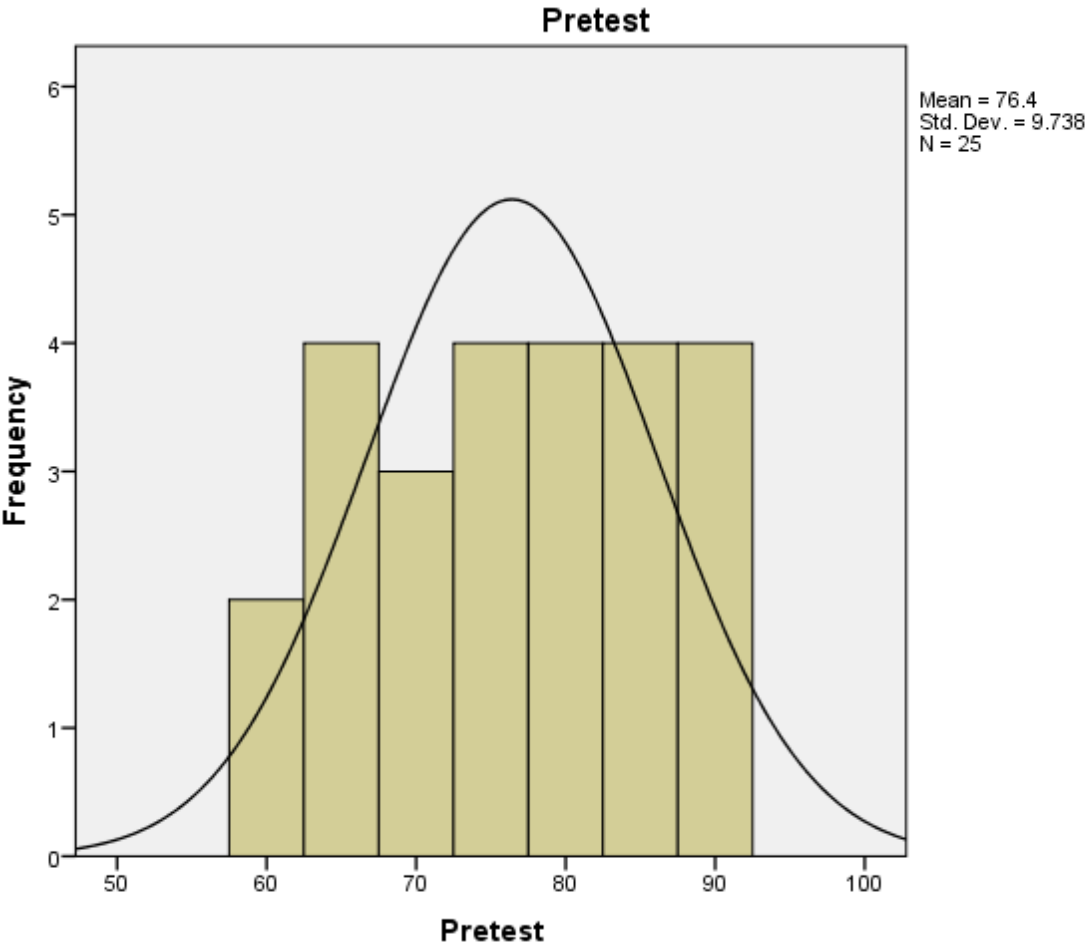
	Frequency	Percent	Valid Percent	Cumulative Percent
68.1818	1	4.0	4.0	4.0
72.7273	4	16.0	16.0	20.0
77.2727	4	16.0	16.0	36.0
81.8182	3	12.0	12.0	48.0
86.3636	4	16.0	16.0	64.0
90.9091	4	16.0	16.0	80.0
95.4545	5	20.0	20.0	100.0
Total	25	100.0	100.0	

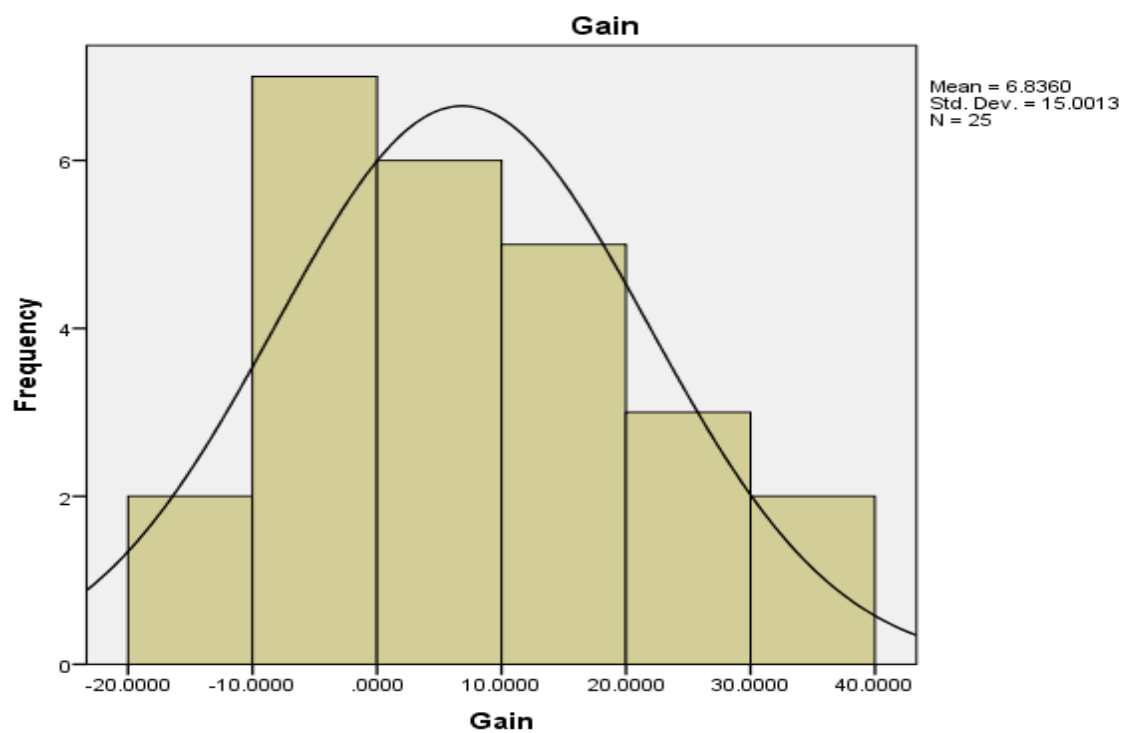
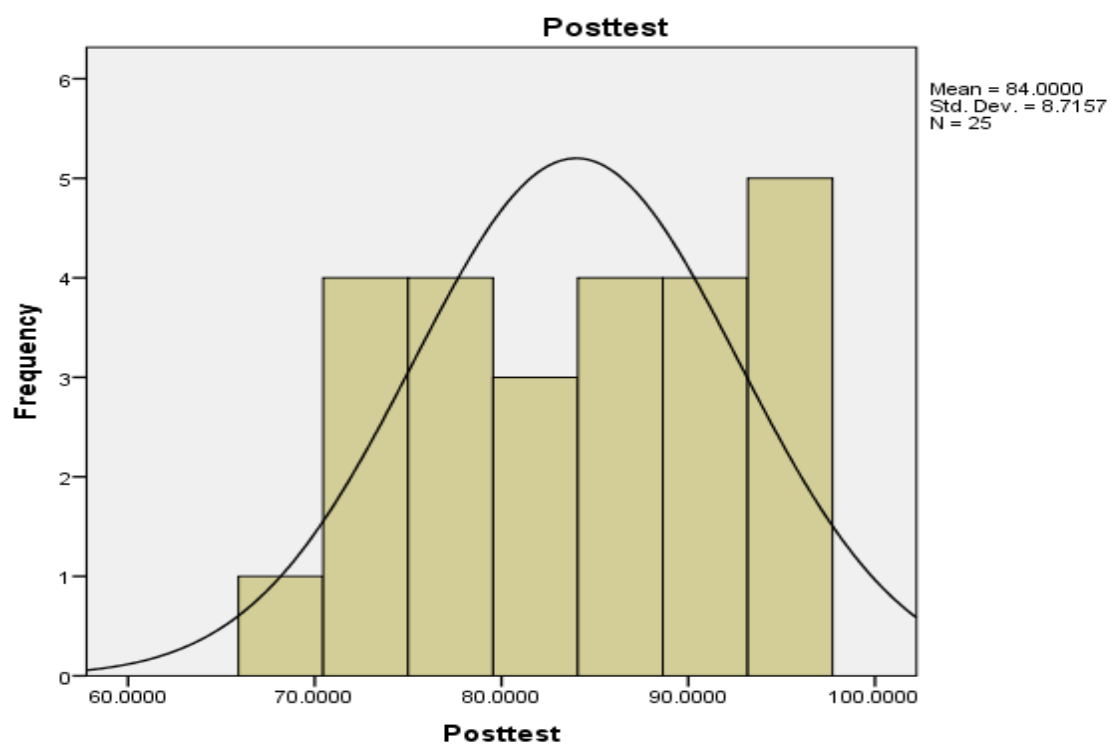
Gain

	Frequency	Percent	Valid Percent	Cumulative Percent
-18.1727	1	4.0	4.0	4.0
-13.6273	1	4.0	4.0	8.0
-9.0818	1	4.0	4.0	12.0
-8.5773	1	4.0	4.0	16.0
-8.0727	1	4.0	4.0	20.0
-7.5682	1	4.0	4.0	24.0
-4.5364	1	4.0	4.0	28.0
-4.0318	1	4.0	4.0	32.0
-3.5273	1	4.0	4.0	36.0
.5136	2	8.0	8.0	44.0
5.5636	1	4.0	4.0	48.0
6.5727	1	4.0	4.0	52.0
7.0773	2	8.0	8.0	60.0
11.1182	1	4.0	4.0	64.0
14.6545	1	4.0	4.0	68.0
15.1591	2	8.0	8.0	76.0
19.7045	1	4.0	4.0	80.0

20.2091	1	4.0	4.0	84.0
25.2591	1	4.0	4.0	88.0
29.8045	1	4.0	4.0	92.0
34.8545	2	8.0	8.0	100.0
Total	25	100.0	100.0	

Histogram





2. ANALISIS INFERENSIAL

a. Uji Normalitas

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Pretest	25	100.0%	0	0.0%	25	100.0%
Posttest	25	100.0%	0	0.0%	25	100.0%
Gain	25	100.0%	0	0.0%	25	100.0%

Descriptives

				Statistic	Std. Error
Pretest	Mean			76.40	1.948
	95% Confidence Interval for Lower Bound			72.38	
	Mean Upper Bound			80.42	
	5% Trimmed Mean			76.56	
	Median			75.00	
	Variance			94.833	
	Std. Deviation			9.738	
	Minimum			60	
	Maximum			90	
	Range			30	
	Interquartile Range			18	
	Skewness			-.135	.464
	Kurtosis			-1.173	.902
	Mean			84.000000	1.7431487
Posttest	95% Confidence Interval for Lower Bound			80.402318	
	Mean Upper Bound			87.597682	
	5% Trimmed Mean			84.191919	
	Median			86.363636	
	Variance			75.964	
	Std. Deviation			8.7157436	

Gain	Minimum	68.1818	
	Maximum	95.4545	
	Range	27.2727	
	Interquartile Range	13.6364	
	Skewness	-.140	.464
	Kurtosis	-1.274	.902
	Mean	6.836000	3.0002669
	95% Confidence Interval for Lower Bound	.643753	
	Mean Upper Bound	13.028247	
	5% Trimmed Mean	6.618283	
	Median	6.572727	
	Variance	225.040	
	Std. Deviation	15.0013344	
	Minimum	-18.1727	
	Maximum	34.8545	
	Range	53.0273	
	Interquartile Range	23.4841	
	Skewness	.349	.464
	Kurtosis	-.747	.902

Tests of Normality

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Pretest	.131	25	.200 [*]	.929	25	.083
Posttest	.146	25	.178	.917	25	.045
Gain	.115	25	.200 [*]	.960	25	.424

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

a. Lilliefors Significance Correction

b. Uji One Sample t-test

One-Sample Statistics

	N	Mean	Std. Deviation	Std. Error Mean
Pretest	25	76.40	9.738	1.948
Posttest	25	84.000000	8.7157436	1.7431487
Gain	25	6.836000	15.0013344	3.0002669

One-Sample Test

	Test Value = 0					
	t	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
Pretest	39.227	24	.000	76.400	72.38	80.42
Posttest	48.189	24	.000	84.0000000	80.402318	87.597682
Gain	2.278	24	.032	6.8360000	.643753	13.028247

c. Uji Gain

$$\begin{aligned}
 g &= \frac{S_{\text{pos}} - S_{\text{pre}}}{S_{\text{mak}} - S_{\text{pre}}} \\
 &= \frac{84 - 76,4}{100 - 76,4} \\
 &= 6,836
 \end{aligned}$$

d. Uji Proporsi (Uji Z) pada ketentuan secara klasikal

$$\begin{aligned}Z_{hit} &= \frac{\frac{x}{n} - \pi_0}{\sqrt{\frac{\pi_0(1-\pi_0)}{n}}} \\&= \frac{\frac{24}{25} - 0,799}{\sqrt{\frac{0,799(1-0,799)}{25}}} \\&= \frac{0,96 - 0,799}{\sqrt{\frac{0,799(0,201)}{25}}} \\&= \frac{0,161}{\sqrt{0,006}} \\&= \frac{0,161}{0,077} \\&= 2,090\end{aligned}$$

$$Z_{tabel} = Z_{0,5-\alpha} = Z_{0,5-0,05} = Z_{0,45} = 1,645$$

Karena $Z_{hit} > Z_{tab}$ (H_0 ditolak)