

CHAPTER V CONCLUSION

5.1. Conclusion

In accordance to the findings of this research, the findings of this study suggest that:

1. The NPL before and after the KBMI grouping do not differ. However, it was found that the pandemic had a more profound impact on the NPL of the Banks. For that reason, hypothesis (H1) is not supported.
2. The research supports the assumption that LDR before and after KBMI grouping had changed. This may be due to the bank becoming better at disbursing credit to customers, and the increased number of customers saving their money in a more liquid form in the bank. Thus, the findings of this research supports the hypothesis (H2).
3. In addition, this research found that the GCG before and after the KBMI grouping do not exhibit a change. However, as these Banks are domestically significant, the lack of change from the “Very Healthy” category is preferable. Hence, the results of this research do not support hypothesis (H3).
4. Further, the findings of this research suggest that there is no apparent difference between the ROA before and after the KBMI grouping. Even so, as the ROA of the KBMI 4 Banks were all in the favourable category, the lack of change is preferable. Nonetheless, the findings of this research do not support hypothesis (H4).
5. Additionally, this research posits that there is no statistically significant change in the NIM of the KBMI 4 Banks before and after the implementation of KBMI grouping. Hence, the findings of this research do not support hypothesis (H5).

6. Moreover, the findings of this research do not corroborate that there was indeed a difference in the OER before and after the KBMI grouping. However, as the OER of the KBMI 4 Banks (Bank Mandiri, BRI, BCA, and BNI) are in the “Very Healthy” and “Healthy” range, it was found that the Banks could effectively manage the operational expenses and the operational income. Nonetheless, the findings of this research do not support hypothesis (H6).
7. Lastly, this research found that there is no statistically significant change between the CAR before and after the KBMI grouping. However, the CAR of the KBMI 4 Banks exceeded the minimum limit set in Basel III, and are consistently in the “Very Healthy” category. For that reason, the findings of this research do not support hypothesis (H7).

5.2. Managerial implications

Furthermore, the findings of this research may hold valuable managerial implications. According to the findings of this research, Bank Mandiri, BNI, and BRI have some areas that they could improve on, which would in turn boost the composite rating of these Banks as well.

Bank Mandiri, BNI, and BRI could implement better risk management practices, as it was evident that during certain time these Banks are further exposed to credit risks. This is evidently seen in 2021, as OJK had carried out a credit restructuring scheme as numerous Banks in the nation experienced distress due to increased credit risk. To mitigate this issue, Banks could be more careful in the provisioning of credit to customers, and carefully follow the regulations placed by OJK and Bank Indonesia on credit regulations.

Moreover, it was found that some Banks were also exposed to increased liquidity risk. To exemplify, during certain time points discussed, the LDR of Bank Mandiri, BRI, and BNI were either on “Healthy” or the “Fairly Healthy” category. For that reason, this research recommends Bank Mandiri, BRI, and BNI to improve

their LDR. Improvement in LDR could be achieved by balancing the disbursement of credit to the customers, minding the amount of funds derived from third party, thereby balancing the liquidity of the Banks.

Further, it was found that the Good Corporate Governance (GCG) principles of Bank Mandiri, BRI, and BNI could be further improved. While categorised as either “Very Healthy”, there were times when the self assessed rating of GCG dropped to the “Healthy” category. While GCG may seem insignificant, it is imperative for these Banks to maintain and improve the GCG rating so that these Banks could be perceived as more trustworthy by the stakeholders of the Banks.

With regards to the earnings of the Banks proxied with ROA, NIM, OER, while Bank Mandiri, BRI, and BCA have maintained the health of these proxies well, at “Very Healthy”. However, the same thing could not be said about BNI, with a distinct fluctuation in the earnings that is measured with ROA, NIM, OER. For that reason, it is advisable for BNI to improve their earnings by eliminating redundant products, identify more profitable customers, and become more selective in giving credit to customers. Moreover, when noticed by the investors, improvement in earnings would signal the investors to invest as the company may be more profitable.

Ultimately, while the CAR of KBMI 4 Banks are in the “Very Healthy” category, the Banks should remain mindful of this high CAR. High CAR may indicate that the Banks are only accumulating funds without circulating it further in the economy. Additionally, it is advisable for OJK to clarify the importance of the KBMI Grouping, and what are the impacts of the KBMI grouping to the RGEC Factors, instead of mere grouping.

5.3. Research Limitations

This research also identified some limitations, which are:

1. There was not a lot of timeframes that could be compared, as the KBMI grouping is newly implemented.

2. The period studied in this research concurred with the COVID-19, thereby affecting the findings of this research.
3. There is not much research that examines the impact of KBMI grouping towards Bank health.

5.4. Future Research Suggestions

There are several recommendations for research to be conducted in the future on this topic. This research could be replicated in the future, with the same proxy, but with more years to compare to. As the KBMI grouping was implemented in 2021, the changes on the RGEC factors are not statistically significant. Perhaps by repeating this research, there would be more data that would make the changes more significant, statistically.

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191224688-Yosephine Putri Ayu Nugroho-Turnitin_Yosephine

ORIGINALITY REPORT

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**Appendix 1
Data**

LDR				
Bank	Year	NPL Before	year	NPL after
Bank Mandiri	2019	0.0239	2021	0.0281
BRI		0.0262		0.0308
BCA		0.0130		0.0220
BNI		0.0230		0.0370
Bank Mandiri	2020	0.0329	2022	0.0188
BRI		0.0294		0.0282
BCA		0.0180		0.0170
BNI		0.0430		0.0280
LDR				
Bank	Year	LDR Before	year	LDR after
Bank Mandiri	2019	0.964	2021	0.800
BRI		0.886		0.837
BCA		0.805		0.620
BNI		0.915		0.797
Bank Mandiri	2020	0.830	2022	0.776
BRI		0.837		0.792

BCA		0.658		0.625
BNI		0.873		0.842
GCG				
Bank	Year	CGC Before	year	GCG after
Bank Mandiri		2		2
BRI	2019	2	2021	2
BCA		1.5		1
BNI		2		2
Bank Mandiri		1		1
BRI	2020	2	2022	2
BCA		1		1
BNI		2		2

ROA				
Bank	Year	ROA Before	year	ROAafter
Bank Mandiri		0.0303		0.0253
BRI	2019	0.0350	2021	0.0272
BCA		0.0320		0.0280
BNI		0.0240		0.0140
Bank Mandiri		0.0164		0.0330
BRI	2020	0.0198	2022	0.0376
BCA		0.0270		0.0320
BNI		0.0050		0.0250

NIM				
Bank	Year	NIM Before	year	NIM after
Bank Mandiri	2019	0.0546	2021	0.0473
BRI		0.0698		0.0689

BCA		0.0620		0.0510
BNI		0.0490		0.0470
Bank Mandiri		0.0448		0.0516
BRI	2020	0.0600	2022	0.0680
BCA		0.0570		0.0530
BNI		0.0450		0.0480

OER				
Bank	Year	OERBefore	year	OERafter
Bank Mandiri		0.6744		0.6726
BRI	2019	0.7010	2021	0.7430
BCA		0.5910		0.5420
BNI		0.7320		0.8120
Bank Mandiri		0.8003		0.5735
BRI	2020	0.8122	2022	0.6420
BCA		0.6350		0.4650
BNI		0.9330		0.6860

CAR				
Bank	Year	CARBefore	year	CARafter
Bank Mandiri		0.2139		0.1960
BRI	2019	0.2152	2021	0.2427
BCA		0.2380		0.2570
BNI		0.2275		0.1970
Bank Mandiri		0.1990		0.1946
BRI	2020	0.1959	2022	0.2230
BCA		0.2580		0.2580
BNI		0.1680		0.1930

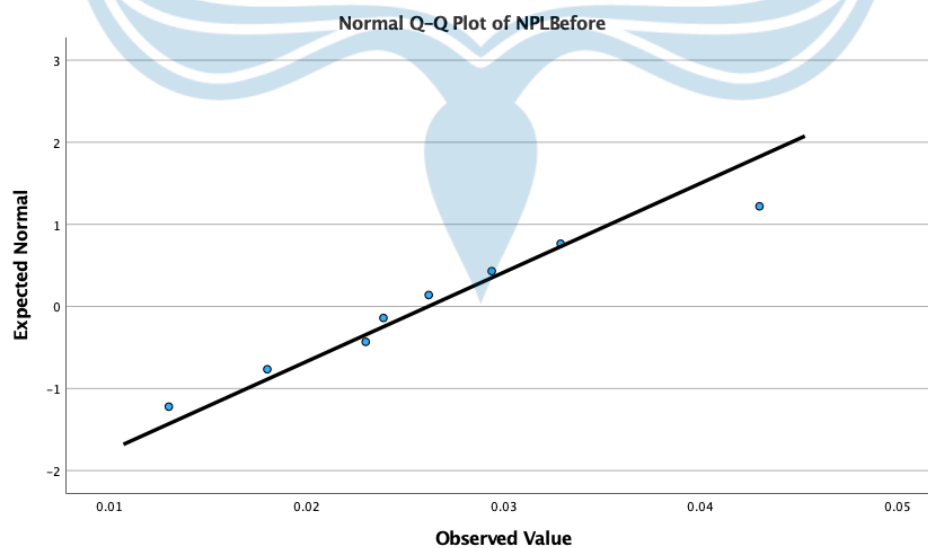
Appendix 2
Data Analysis

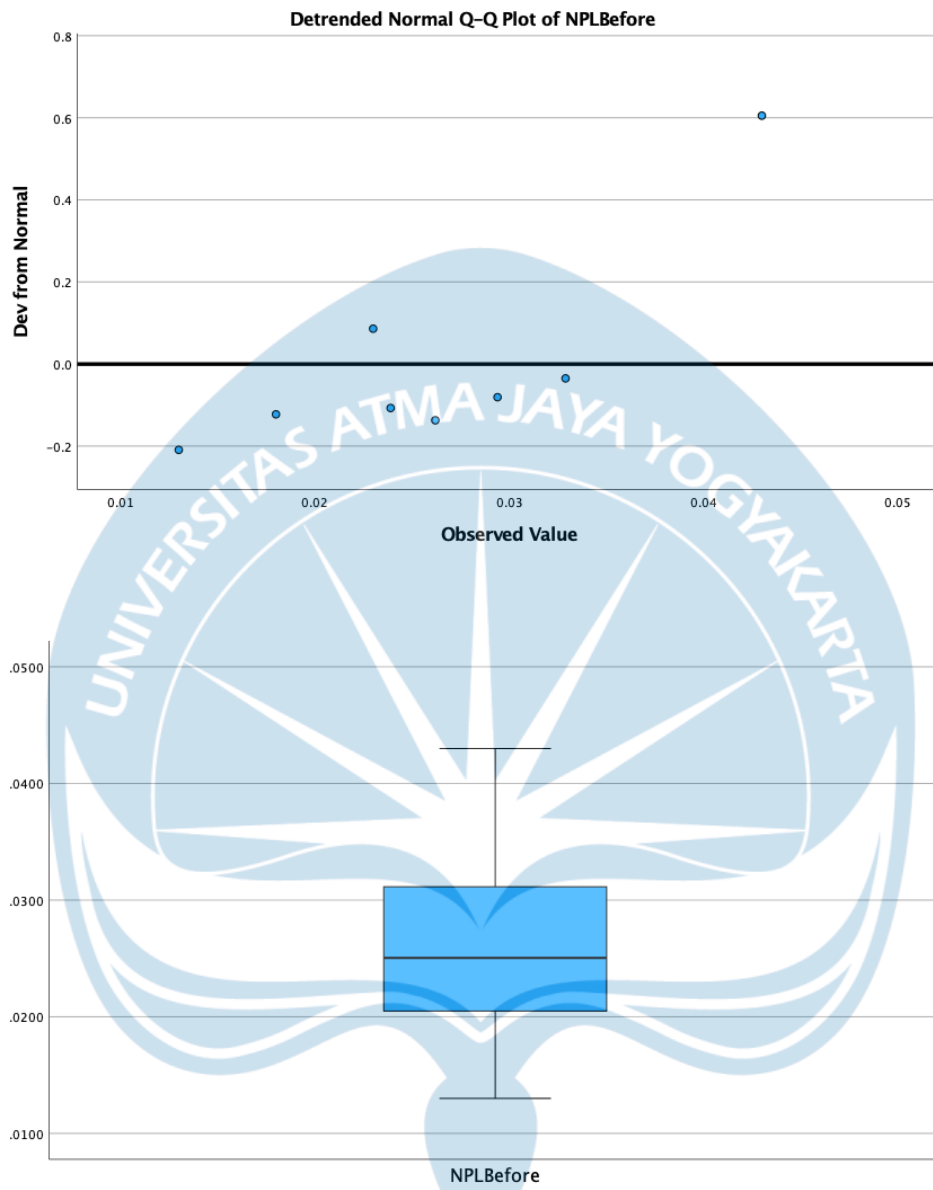
Case Processing Summary

	Valid		Cases Missing		Total	
	N	Percent	N	Percent	N	Percent
NPLBefore	8	100.0%	0	0.0%	8	100.0%
NPLafter	8	100.0%	0	0.0%	8	100.0%

Descriptives

		Statistic	Std. Error	
NPLBefore	Mean	.026175	.0032579	
	95% Confidence Interval for Mean	Lower Bound	.018471	
		Upper Bound	.033879	
	5% Trimmed Mean	.025972		
	Median	.025050		
	Variance	.000		
	Std. Deviation	.0092147		
	Minimum	.0130		
	Maximum	.0430		
	Range	.0300		
	Interquartile Range	.0128		
	Skewness	.541	.752	
	Kurtosis	.664	1.481	
	NPLafter	Mean	.026237	.0023364
95% Confidence Interval for Mean		Lower Bound	.020713	
		Upper Bound	.031762	
5% Trimmed Mean		.026153		
Median		.028050		
Variance		.000		
Std. Deviation		.0066082		
Minimum		.0170		
Maximum		.0370		
Range		.0200		
Interquartile Range		.0106		
Skewness		.056	.752	
Kurtosis		-.486	1.481	





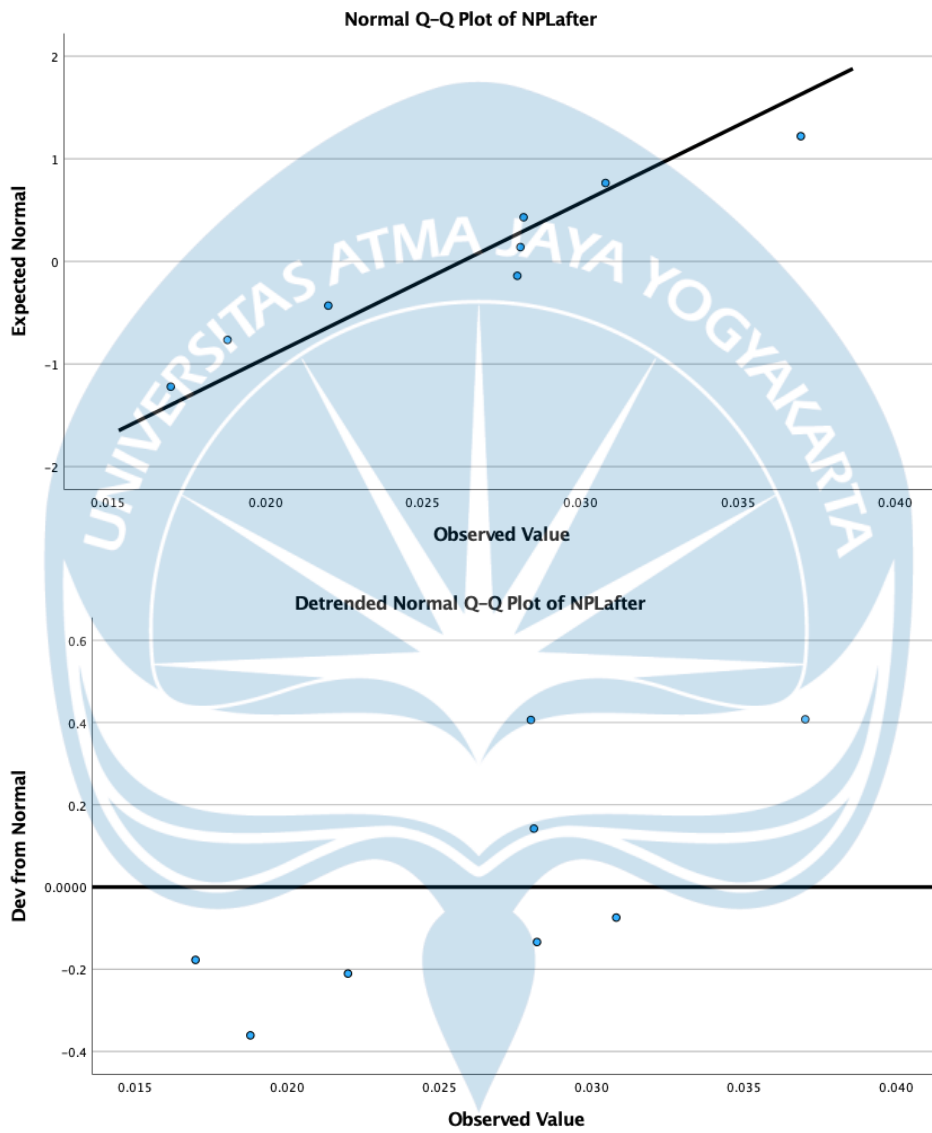
NPLafter Stem-and-Leaf Plot

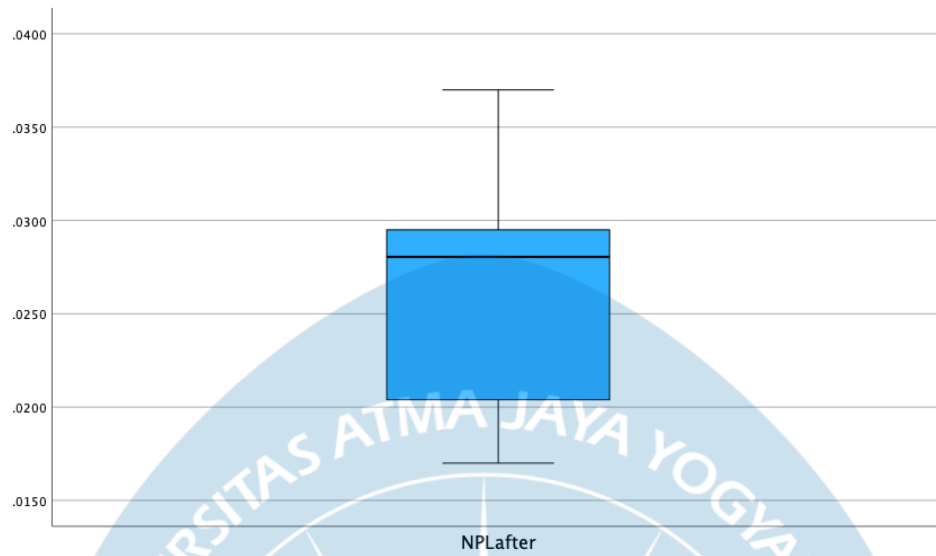
Frequency Stem & Leaf

2.00	1 . 78
4.00	2 . 2888
2.00	3 . 07

Stem width: .0100

Each leaf: 1 case(s)





Paired Samples Effect Sizes

Pair 1	NPLBefore - NPLafter	Standardizer ^a	Point Estimate	95% Confidence Interval	
				Lower	Upper
	Cohen's d	.0102958	-.006	-.699	.687
	Hedges' correction	.0115917	-.005	-.621	.610

- a. The denominator used in estimating the effect sizes.
 Cohen's d uses the sample standard deviation of the mean difference.
 Hedges' correction uses the sample standard deviation of the mean difference, plus a correction factor.

Descriptives

		Statistic	Std. Error	
LDRBefore	Mean	.84600	.032287	
	95% Confidence Interval for Mean	Lower Bound	.76965	
		Upper Bound	.92235	
	5% Trimmed Mean	.84989		
	Median	.85500		
	Variance	.008		
	Std. Deviation	.091320		
	Minimum	.658		
	Maximum	.964		
	Range	.306		
	Interquartile Range	.097		
	Skewness	-1.166	.752	
	Kurtosis	2.356	1.481	
LDRafter	Mean	.76113	.031258	
	95% Confidence Interval for Mean	Lower Bound	.68721	
		Upper Bound	.83504	
	5% Trimmed Mean	.76447		
	Median	.79450		
	Variance	.008		
	Std. Deviation	.088412		
	Minimum	.620		
	Maximum	.842		
	Range	.222		
	Interquartile Range	.165		
	Skewness	-1.166	.752	
	Kurtosis	-.294	1.481	

LDRBefore Stem-and-Leaf Plot

Frequency Stem & Leaf

1.00 Extremes (= < .66)

3.00 8 . 033

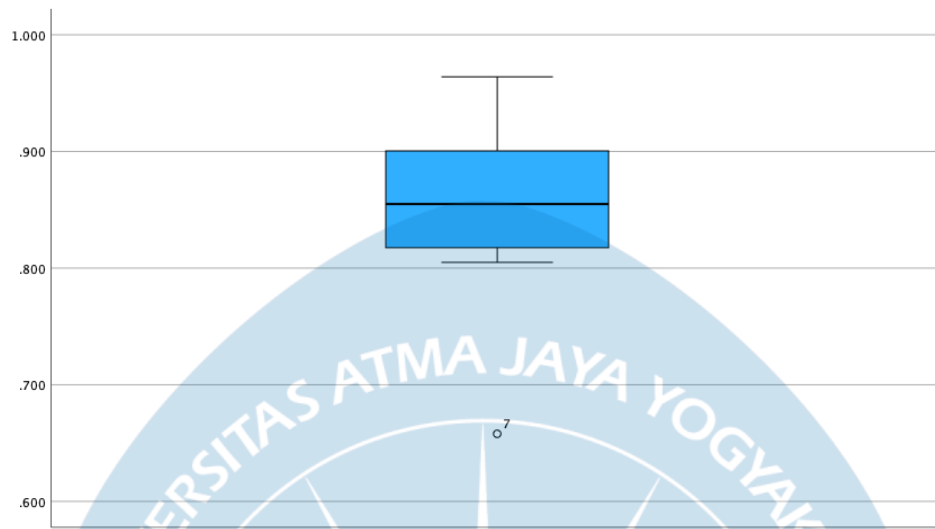
2.00 8 . 78

1.00 9 . 1

1.00 9 . 6

Stem width: .100

Each leaf: 1 case(s)



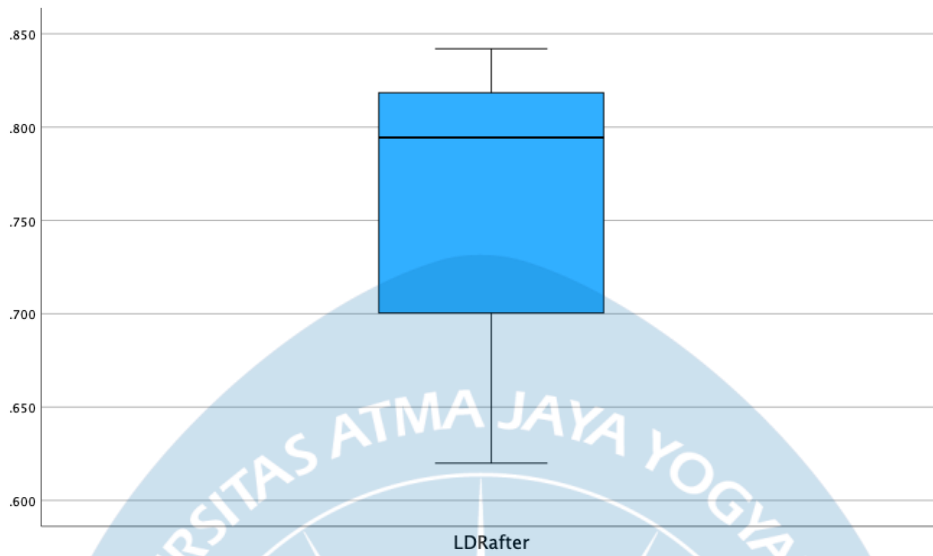
LDRBefore

LDRafter Stem-and-Leaf Plot

Frequency	Stem & Leaf
2.00	6 . 22
3.00	7 . 799
3.00	8 . 034

Stem width: .100

Each leaf: 1 case(s)



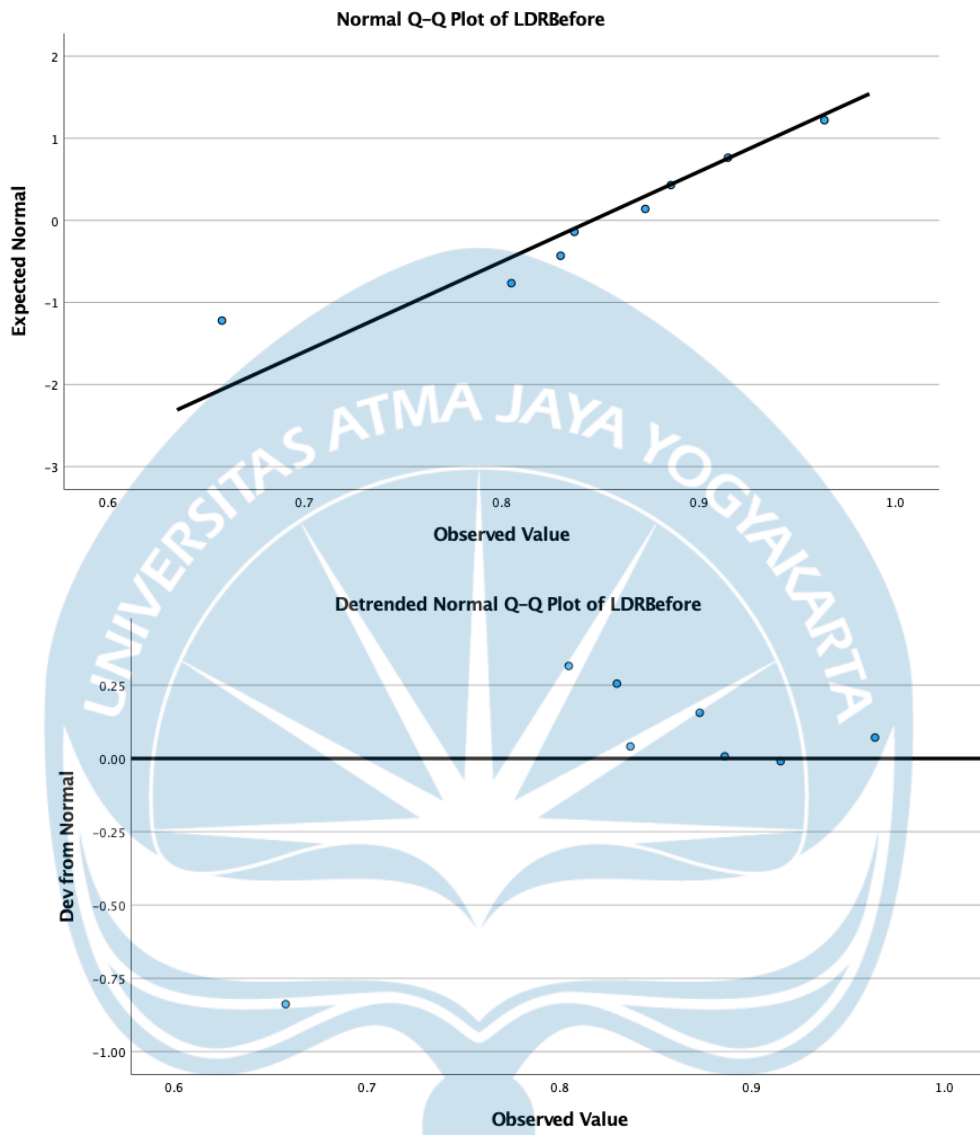
LDRafter

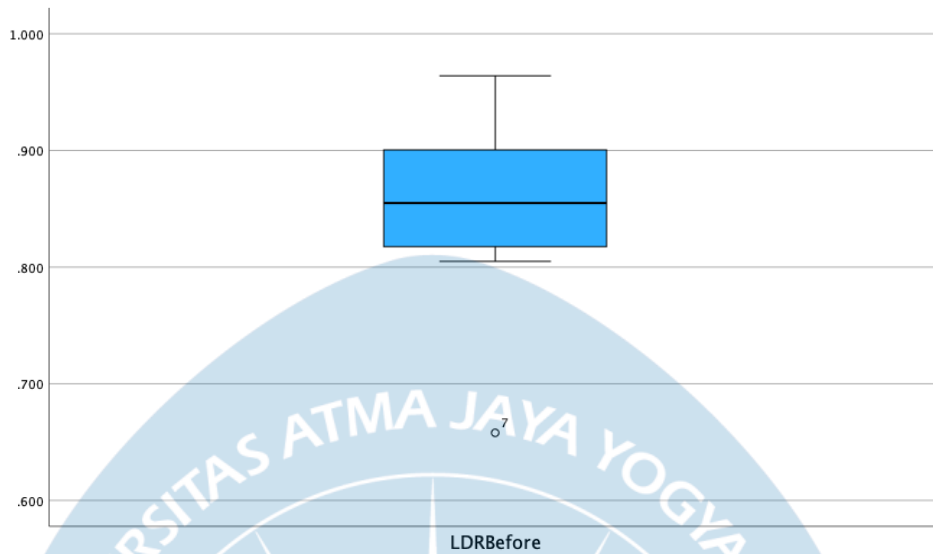
LDRBefore Stem-and-Leaf Plot

Frequency	Stem & Leaf
1.00	Extremes (= <.66)
3.00	8 . 033
2.00	8 . 78
1.00	9 . 1
1.00	9 . 6

Stem width: .100

Each leaf: 1 case(s)



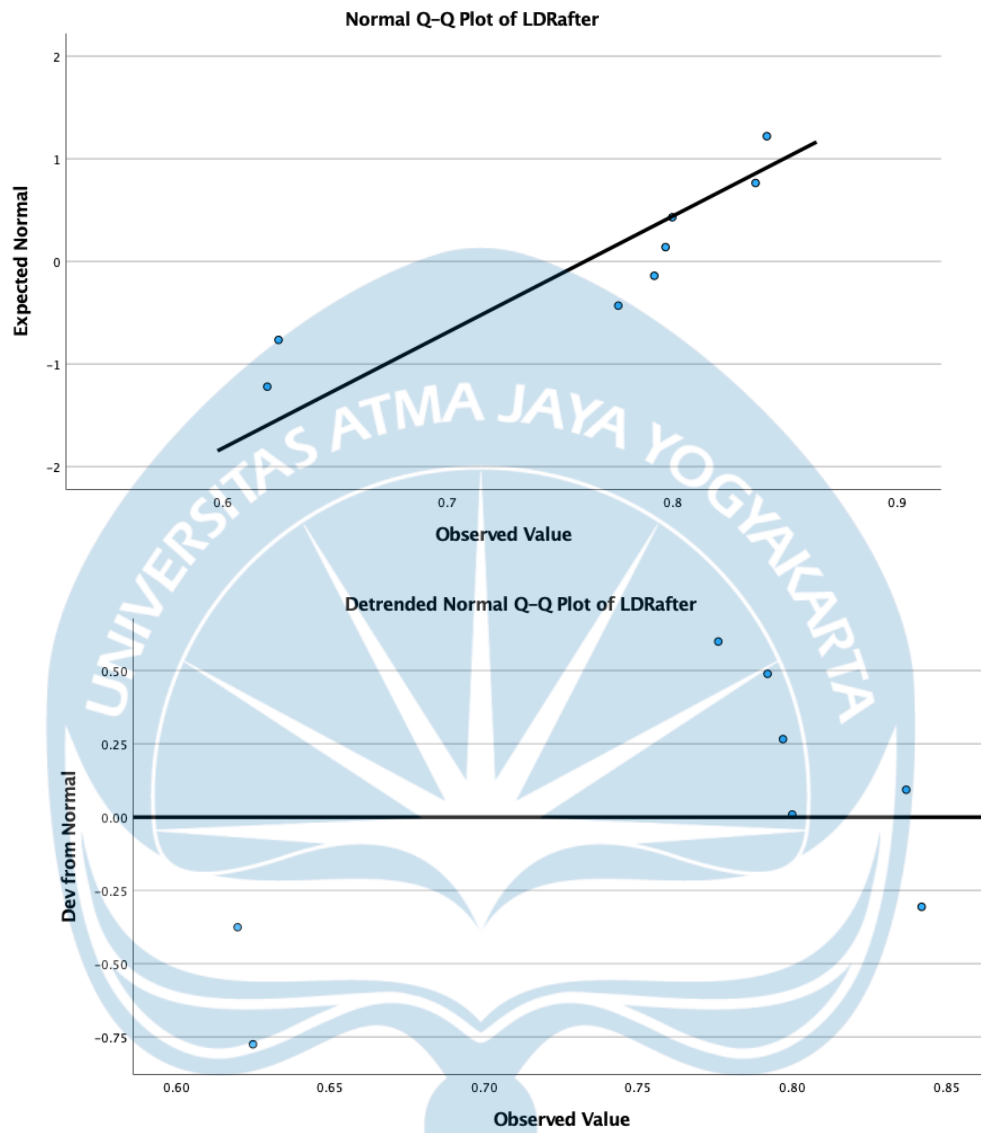


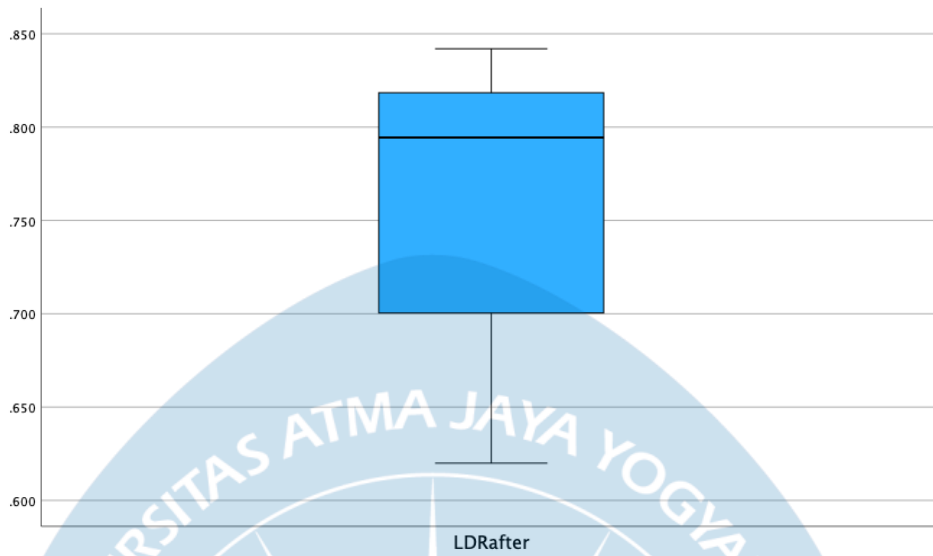
LDRafter Stem-and-Leaf Plot

Frequency	Stem & Leaf
2.00	6 . 22
3.00	7 . 799
3.00	8 . 034

Stem width: .100

Each leaf: 1 case(s)





Paired Samples Effect Sizes

Pair 1	LDRBefore - LDRafter	Cohen's d	Standardizer ^a	Point Estimate	95% Confidence Interval	
					Lower	Upper
			.061883	1.372	.361	2.337
		Hedges' correction	.069673	1.218	.321	2.075

a. The denominator used in estimating the effect sizes.

Cohen's d uses the sample standard deviation of the mean difference.

Hedges' correction uses the sample standard deviation of the mean difference, plus a correction factor.

Descriptives

		Statistic	Std. Error	
CGCBefore	Mean	1.688	.1619	
	95% Confidence Interval for Mean	Lower Bound	1.305	
		Upper Bound	2.070	
	5% Trimmed Mean	1.708		
	Median	2.000		
	Variance	.210		
	Std. Deviation	.4581		
	Minimum	1.0		
	Maximum	2.0		
	Range	1.0		
	Interquartile Range	.9		
	Skewness	-.999	.752	
	Kurtosis	-1.039	1.481	
GCGafter	Mean	1.63	.183	
	95% Confidence Interval for Mean	Lower Bound	1.19	
		Upper Bound	2.06	
	5% Trimmed Mean	1.64		
	Median	2.00		
	Variance	.268		
	Std. Deviation	.518		
	Minimum	1		
	Maximum	2		
	Range	1		
	Interquartile Range	1		
	Skewness	-.644	.752	
	Kurtosis	-2.240	1.481	

CGCBefore Stem-and-Leaf Plot

Frequency Stem & Leaf

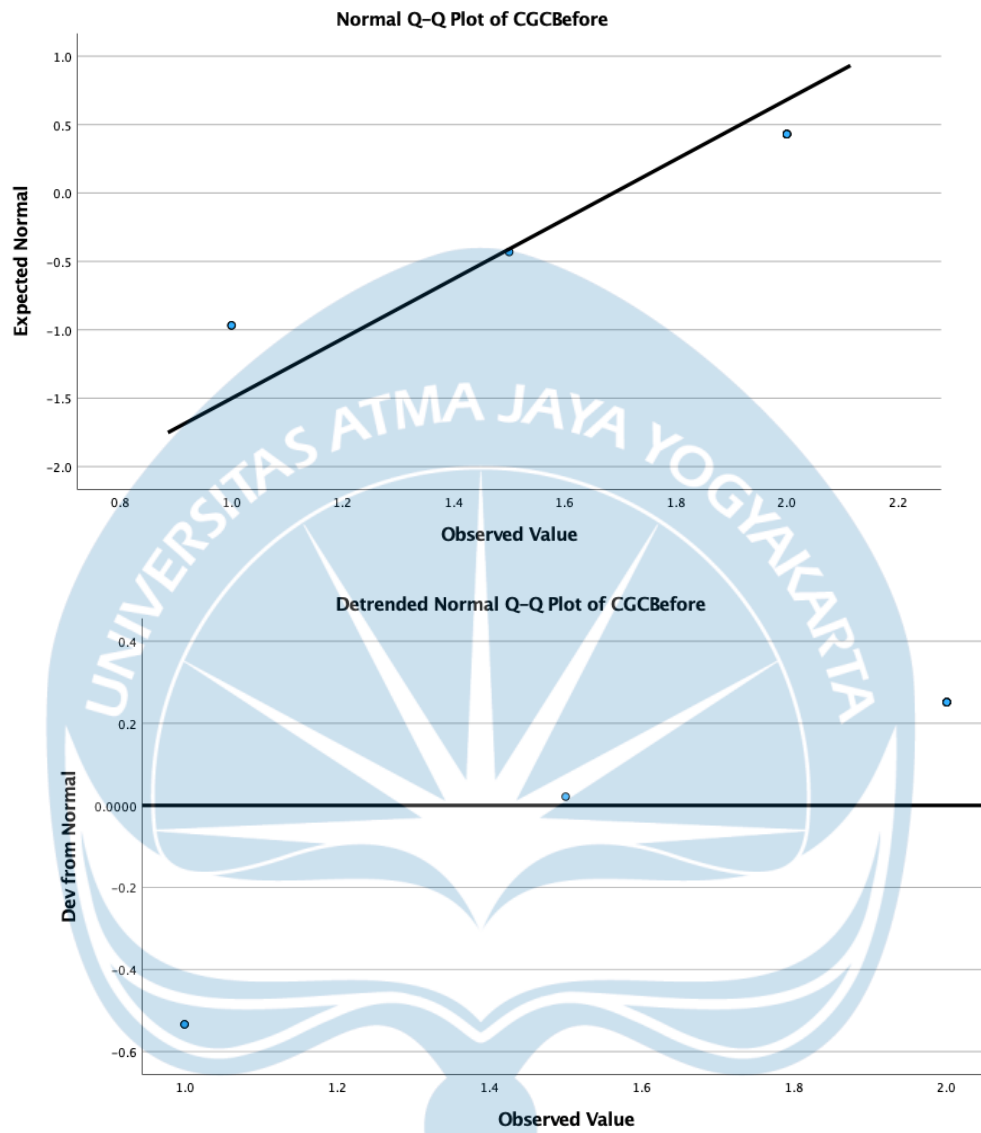
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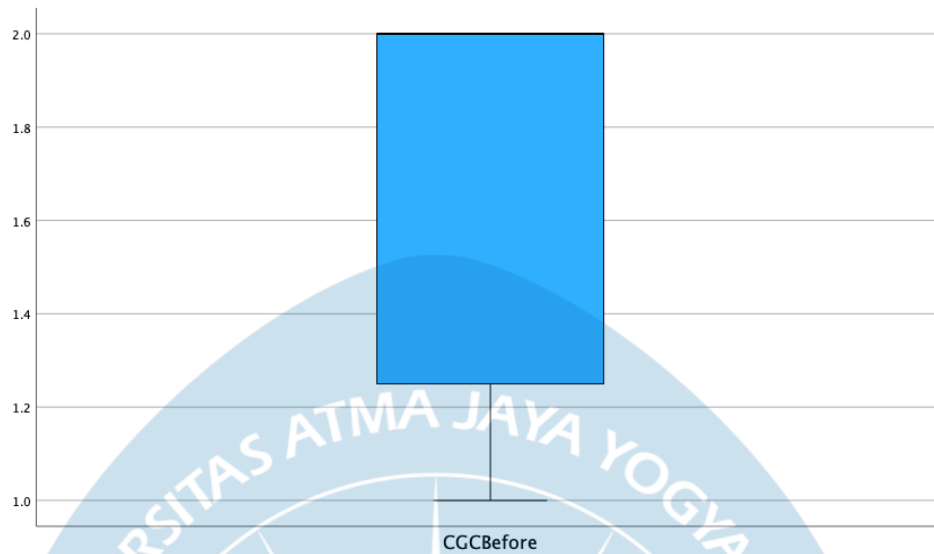
2.00  1 . 00
1.00  1 . 5
5.00  2 . 00000

```

Stem width: 1.0

Each leaf: 1 case(s)



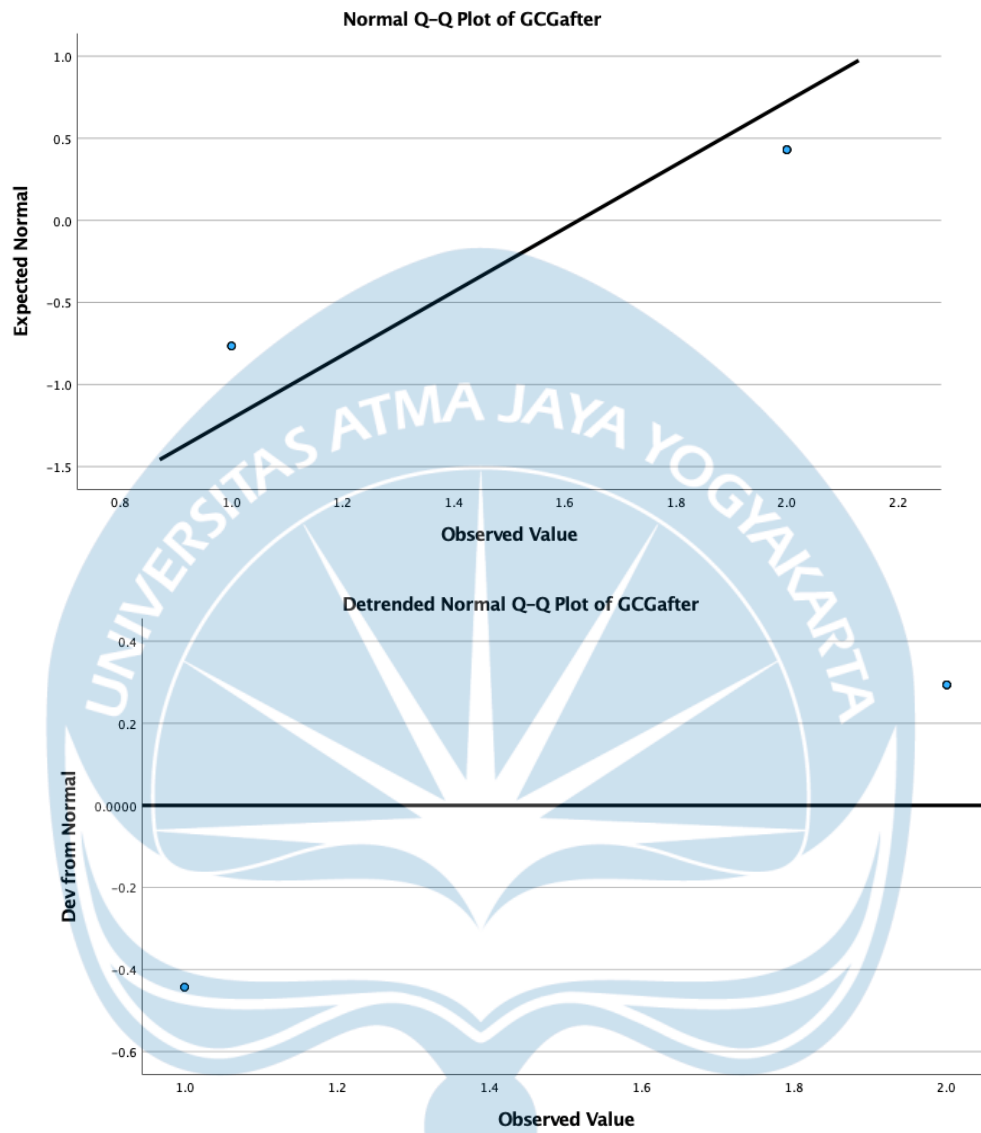


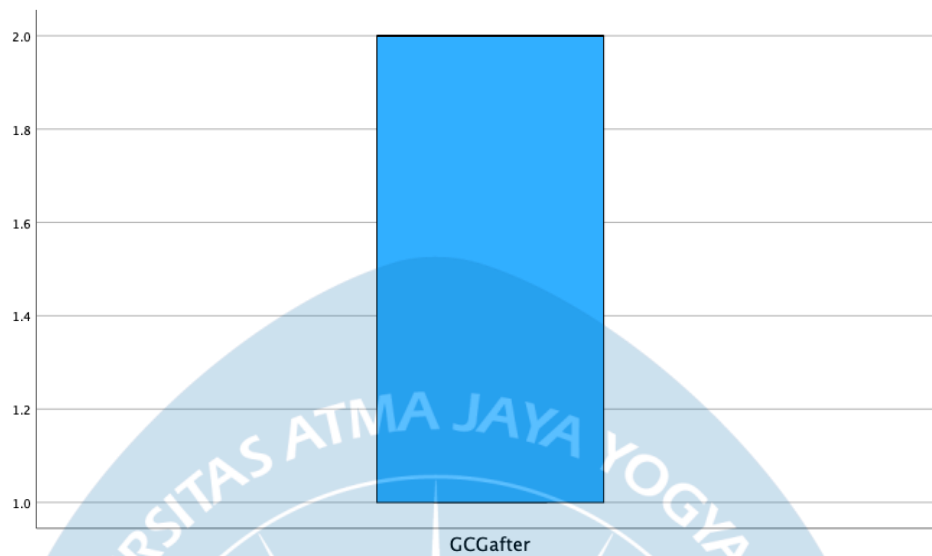
GCGafter Stem-and-Leaf Plot

Frequency	Stem & Leaf
3.00	1 . 000
.00	1 .
5.00	2 . 00000

Stem width: 1

Each leaf: 1 case(s)





Descriptives

		Statistic	Std. Error	
ROABefore	Mean	.023688	.0034572	
	95% Confidence Interval for Mean	Lower Bound	.015513	
		Upper Bound	.031862	
	5% Trimmed Mean	.024097		
	Median	.025500		
	Variance	.000		
	Std. Deviation	.0097783		
	Minimum	.0050		
	Maximum	.0350		
	Range	.0300		
	Interquartile Range	.0143		
	Skewness	-.942	.752	
	Kurtosis	.657	1.481	
ROAafter	Mean	.027763	.0024844	
	95% Confidence Interval for Mean	Lower Bound	.021888	
		Upper Bound	.033637	
	5% Trimmed Mean	.027981		
	Median	.027600		
	Variance	.000		
	Std. Deviation	.0070269		
	Minimum	.0140		
	Maximum	.0376		
	Range	.0236		
	Interquartile Range	.0077		
	Skewness	-.808	.752	
	Kurtosis	1.627	1.481	

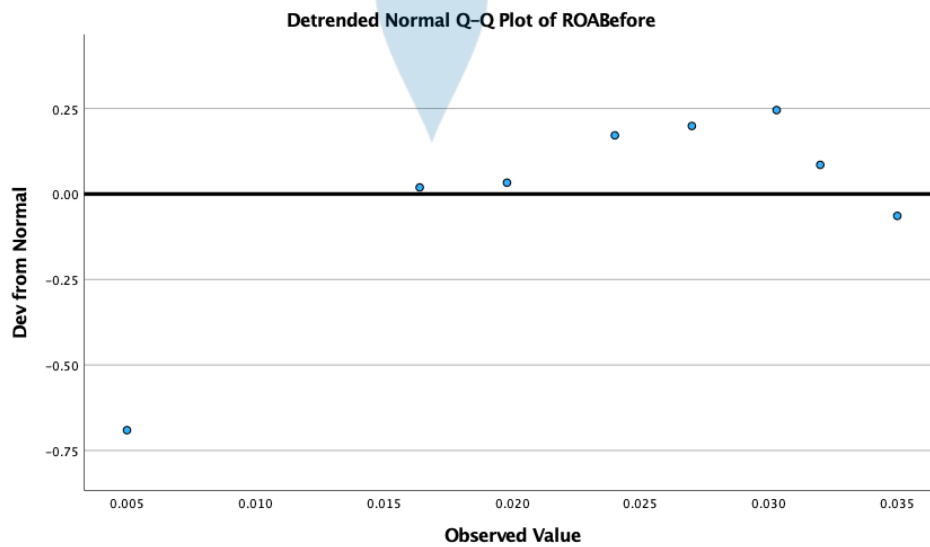
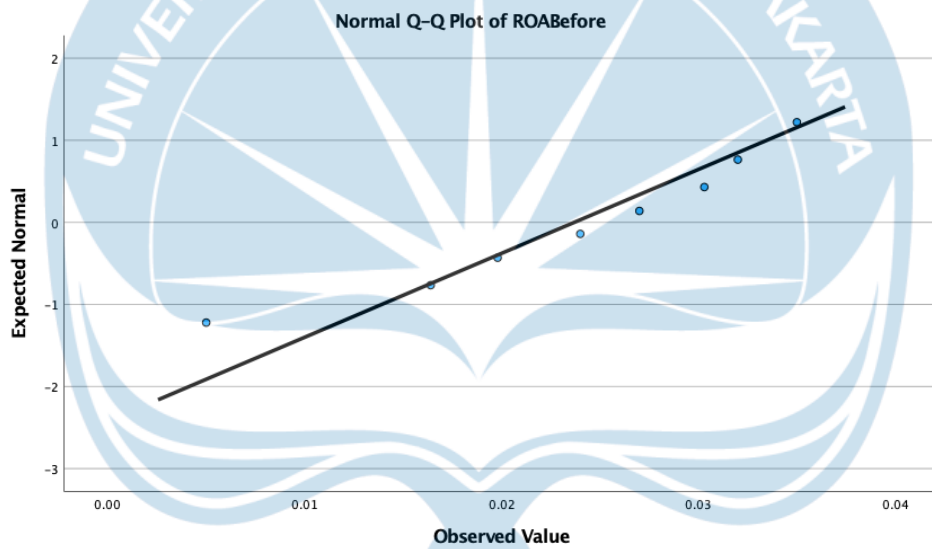
ROABefore Stem-and-Leaf Plot

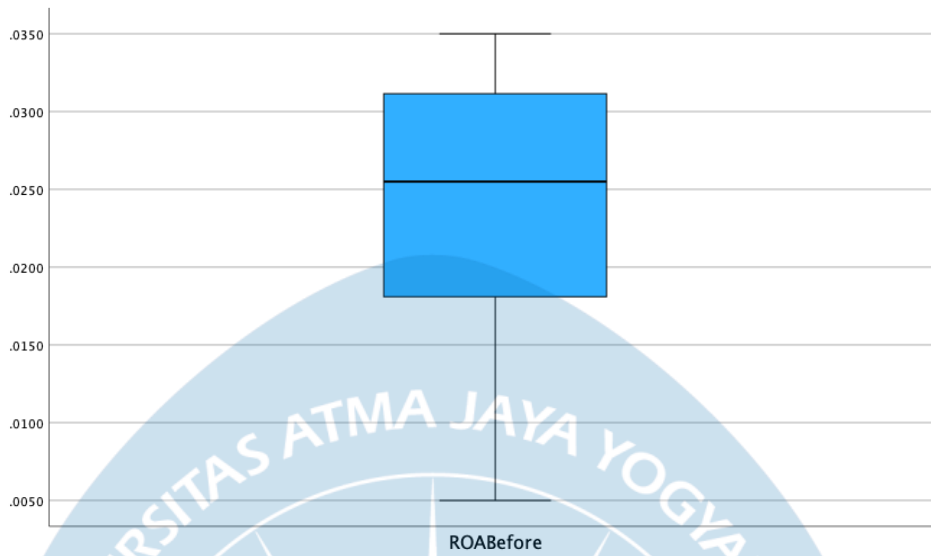
Frequency Stem & Leaf

1.00 0 . 5
 2.00 1 . 69
 2.00 2 . 47
 3.00 3 . 025

Stem width: .0100

Each leaf: 1 case(s)





ROAafter Stem-and-Leaf Plot

Frequency Stem & Leaf

1.00 Extremes ($=<.014$)

.00 2 .

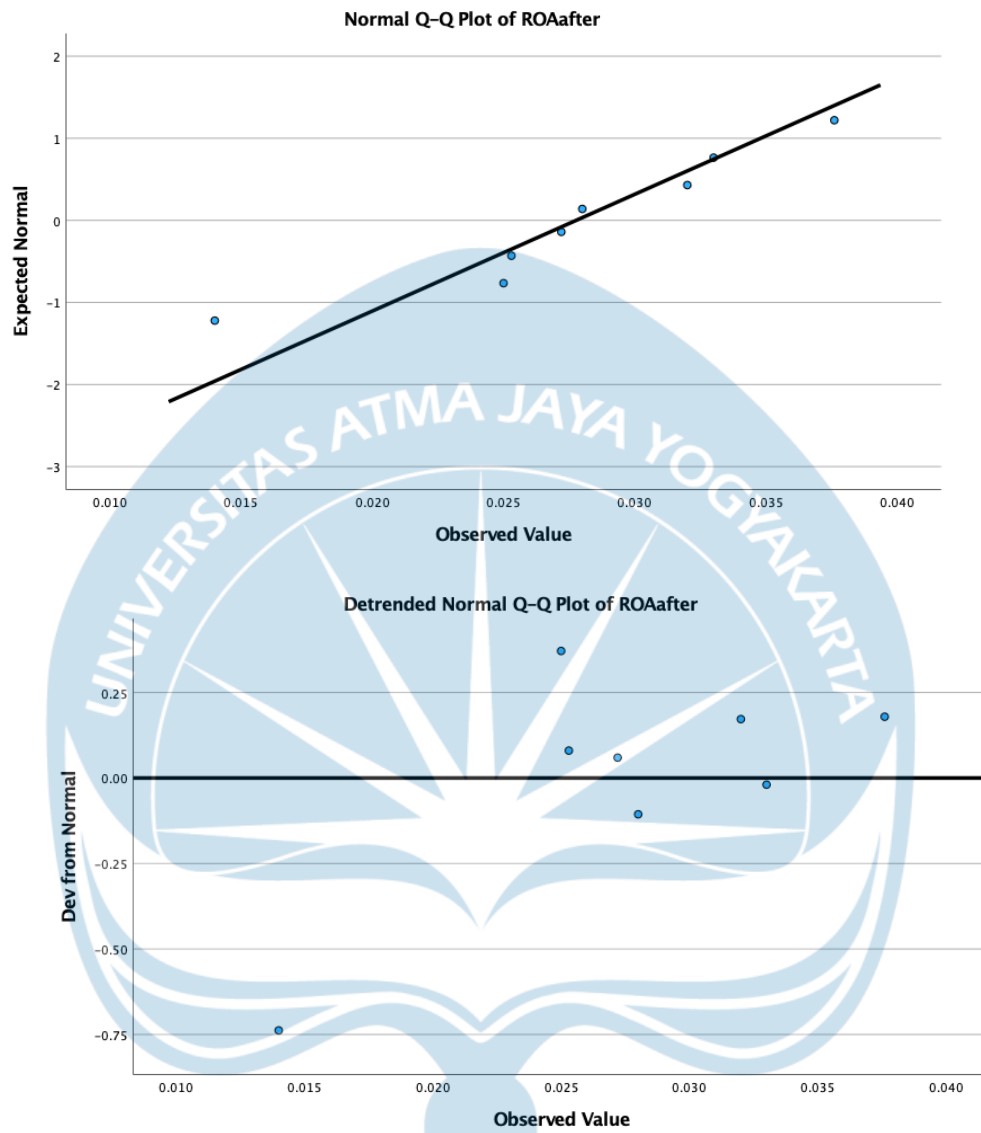
4.00 2 . 5578

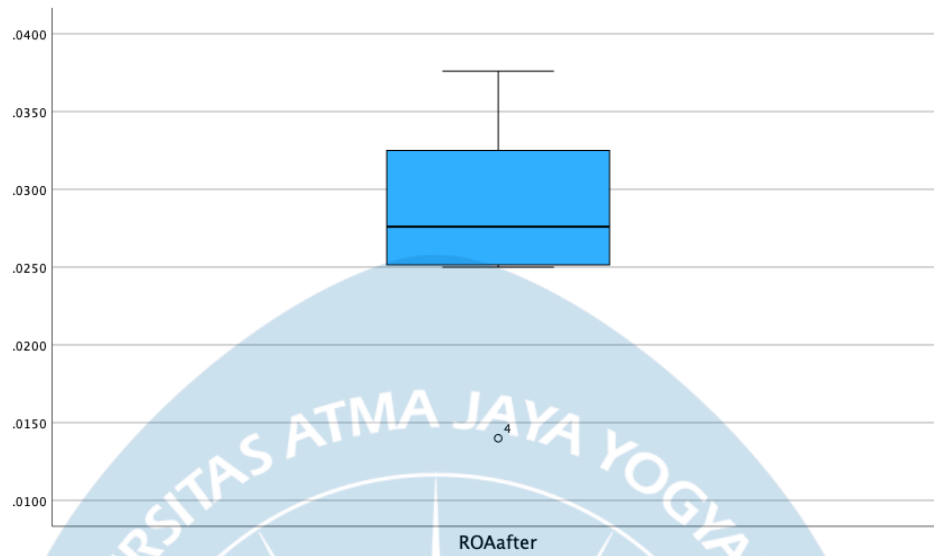
2.00 3 . 23

1.00 3 . 7

Stem width: .0100

Each leaf: 1 case(s)





Paired Samples Effect Sizes

Pair 1	ROABefore - ROAafter	Cohen's d	Standardizer ^a	Point Estimate	95% Confidence Interval	
					Lower	Upper
			.0124579	-.327	-1.029	.397
		Hedges' correction	.0140260	-.291	-.914	.352

a. The denominator used in estimating the effect sizes.

Cohen's d uses the sample standard deviation of the mean difference.

Hedges' correction uses the sample standard deviation of the mean difference, plus a correction factor.

Descriptives

		Statistic	Std. Error	
NIMBefore	Mean	.055275	.0030956	
	95% Confidence Interval for Mean	Lower Bound	.047955	
		Upper Bound	.062595	
	5% Trimmed Mean	.055050		
	Median	.055800		
	Variance	.000		
	Std. Deviation	.0087557		
	Minimum	.0448		
	Maximum	.0698		
	Range	.0250		
	Interquartile Range	.0155		
	Skewness	.283	.752	
	Kurtosis	-.711	1.481	
	NIMafter	Mean	.054350	.0031698
95% Confidence Interval for Mean		Lower Bound	.046855	
		Upper Bound	.061845	
5% Trimmed Mean		.053950		
Median		.051300		
Variance		.000		
Std. Deviation		.0089656		
Minimum		.0470		
Maximum		.0689		
Range		.0219		
Interquartile Range		.0168		
Skewness		1.205	.752	
Kurtosis		-.298	1.481	

NIMBefore Stem-and-

Leaf Plot

Frequency Stem & Leaf

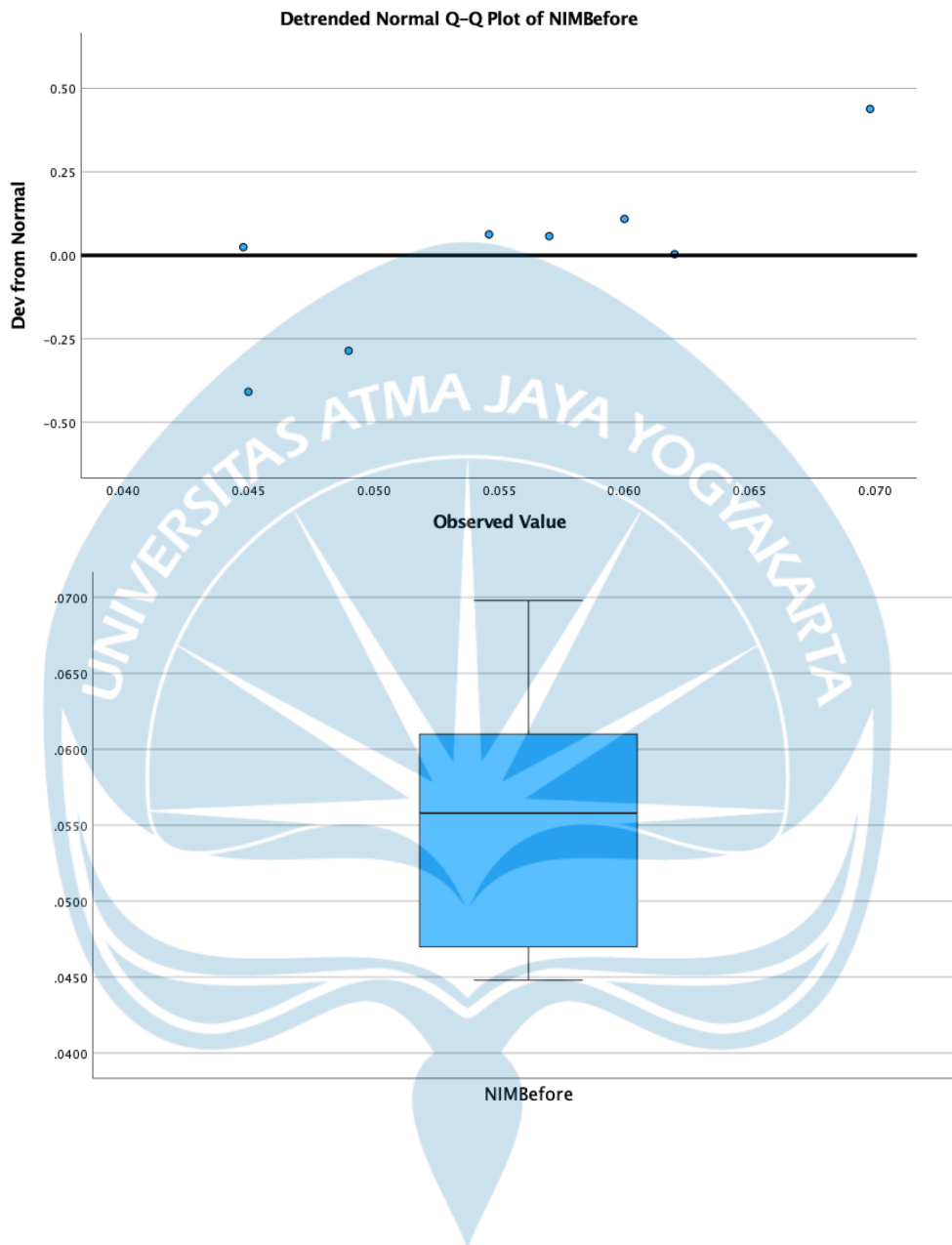
3.00 4 . 459

2.00 5 . 47

3.00 6 . 029

Stem width: .0100

Each leaf: 1 case(s)



NIMafter Stem-and-Leaf Plot

Frequency Stem & Leaf

3.00 4 . 778

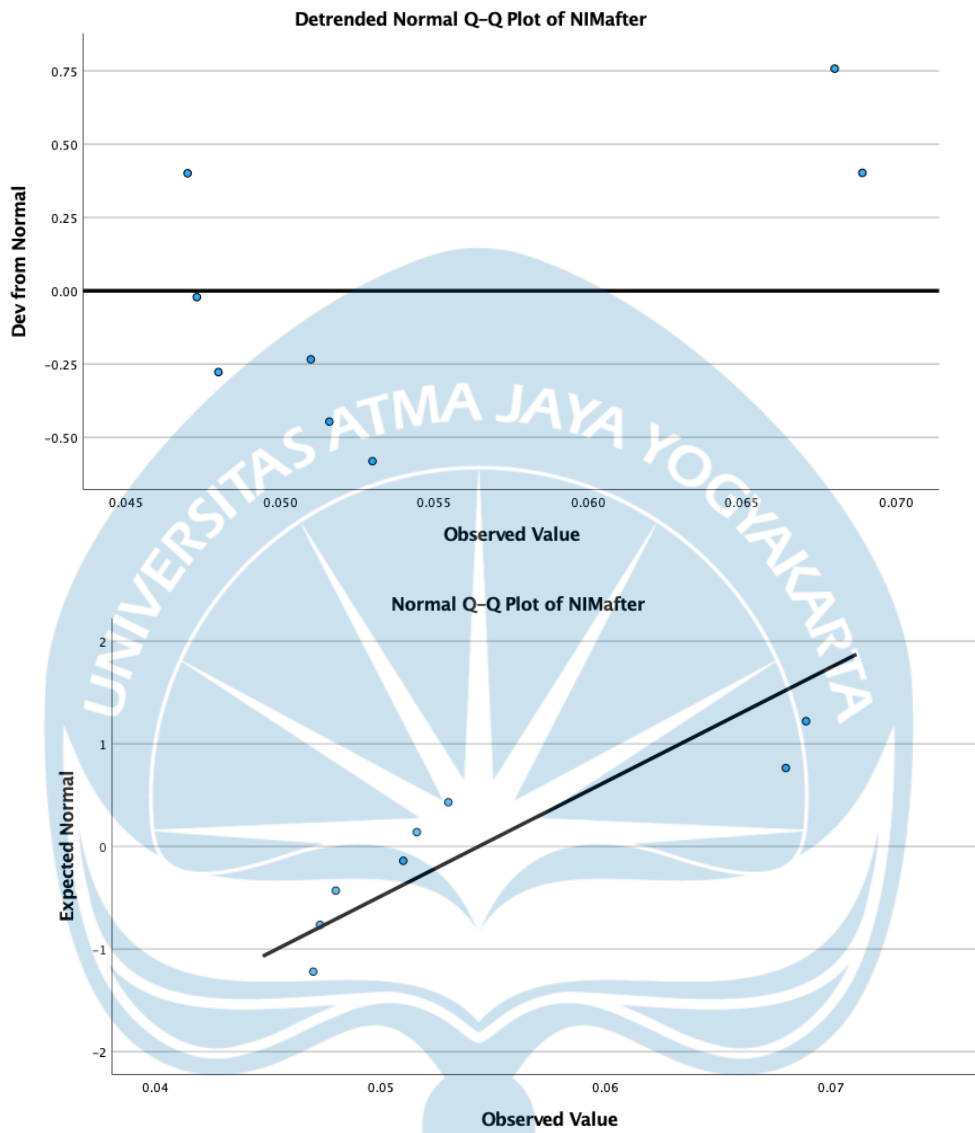
3.00 5 . 113

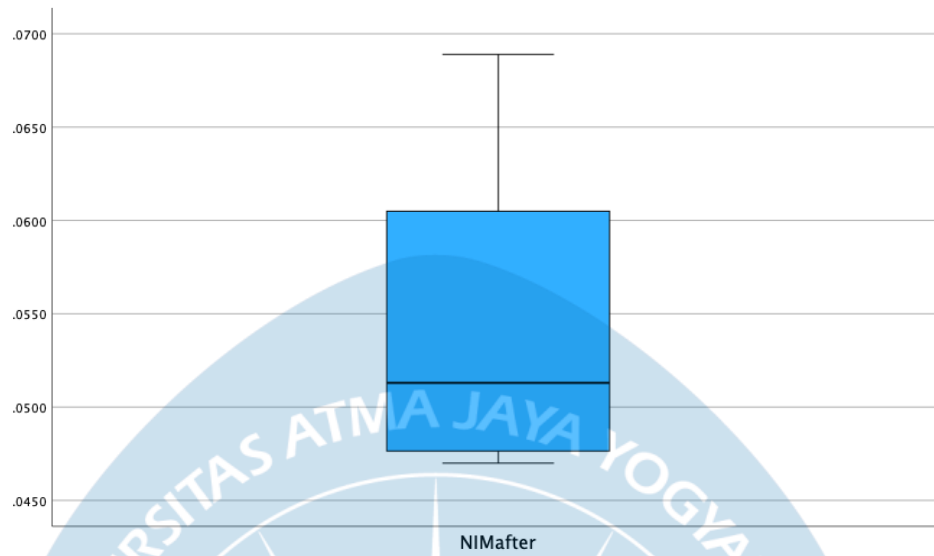
2.00 6 . 88

Stem width: .0100

Each leaf: 1 case(s)



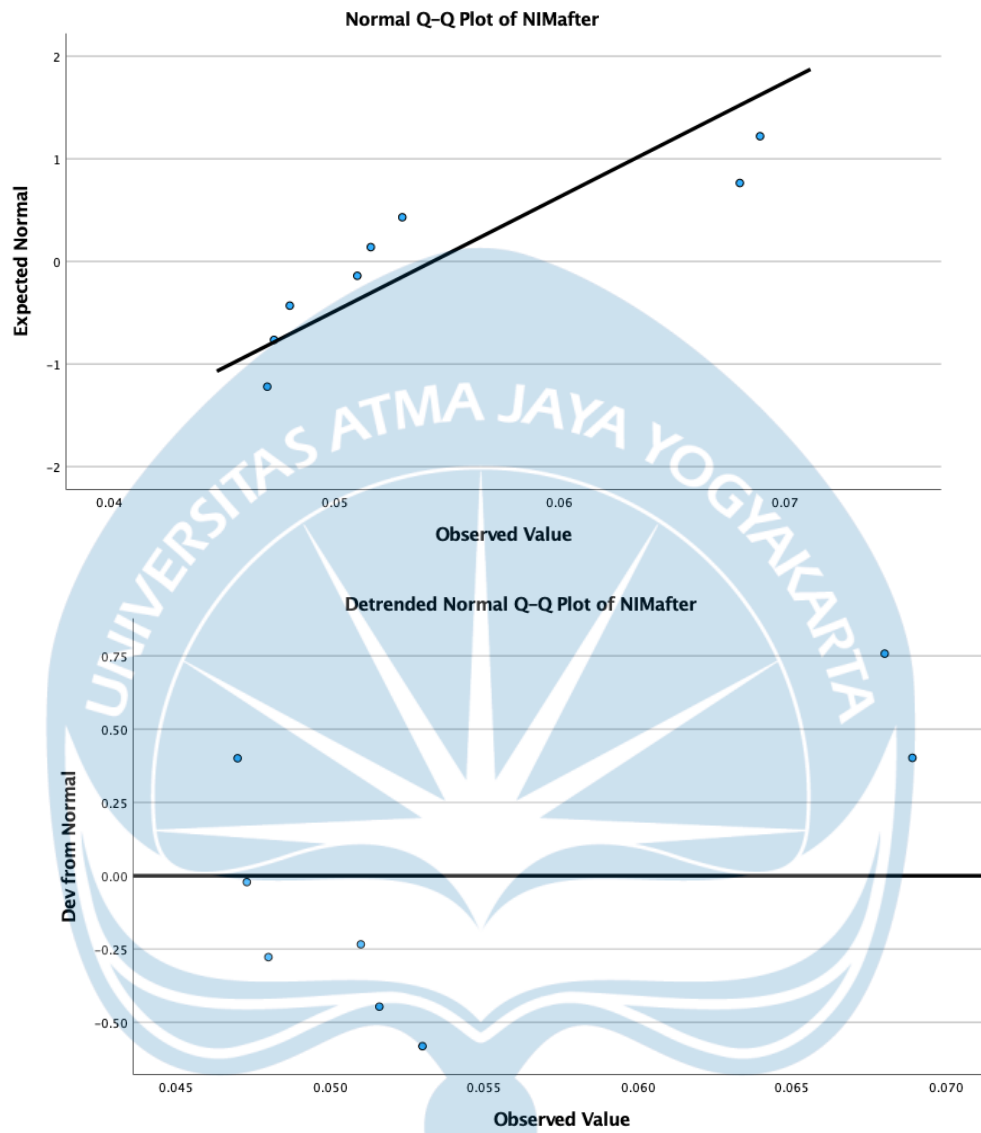


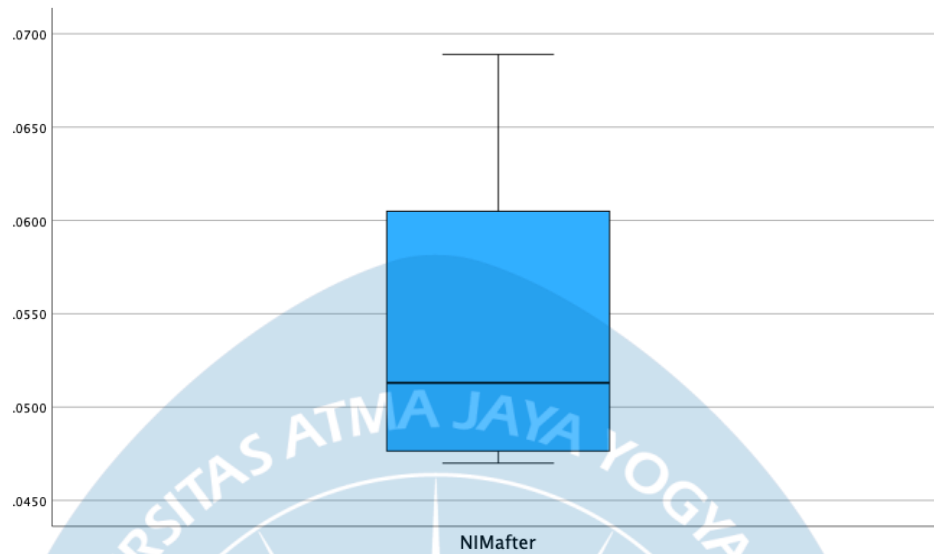


Paired Samples Effect Sizes

Pair 1	NIMBefore - NIMafter	Standardizer ^a	Point Estimate	95% Confidence Interval	
				Lower	Upper
	Cohen's d	.0066278	.140	-.562	.831
	Hedges' correction	.0074620	.124	-.499	.738

- a. The denominator used in estimating the effect sizes.
 Cohen's d uses the sample standard deviation of the mean difference.
 Hedges' correction uses the sample standard deviation of the mean difference, plus a correction factor.





		Statistic		Std. Error
OERBefore	Mean		.734863	.0389599
	95% Confidence Interval for Mean	Lower Bound	.642737	
		Upper Bound	.826988	
	5% Trimmed Mean		.731847	
	Median		.716500	
	Variance		.012	
	Std. Deviation		.1101954	
	Minimum		.5910	
	Maximum		.9330	
	Range		.3420	
	Interquartile Range		.1644	
	Skewness		.610	.752
Kurtosis		.071	1.481	
OERafter	Mean		.642013	.0396400
	95% Confidence Interval for Mean	Lower Bound	.548279	
		Upper Bound	.735746	
	5% Trimmed Mean		.642403	
	Median		.657300	
	Variance		.013	
	Std. Deviation		.1121189	
	Minimum		.4650	
	Maximum		.8120	
	Range		.3470	
	Interquartile Range		.1789	
	Skewness		-.110	.752
Kurtosis		-.458	1.481	

OERBefore Stem-and-

Leaf Plot

Frequency Stem & Leaf

1.00 5 . 9

2.00 6 . 37

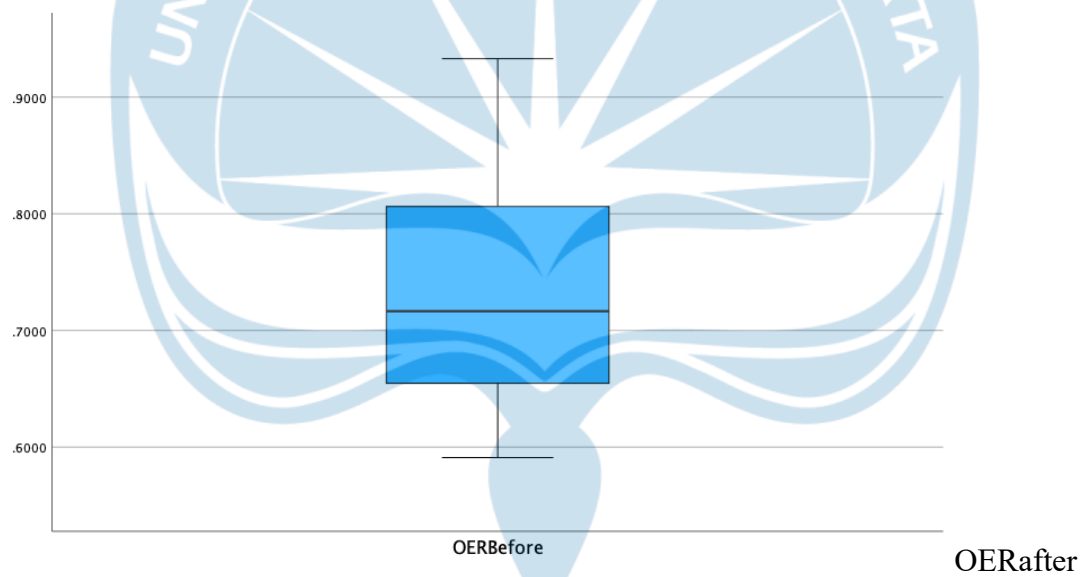
2.00 7 . 03

2.00 8 . 01

1.00 9 . 3

Stem width: .1000

Each leaf: 1 case(s)



Frequency Stem & Leaf

1.00 4 . 6

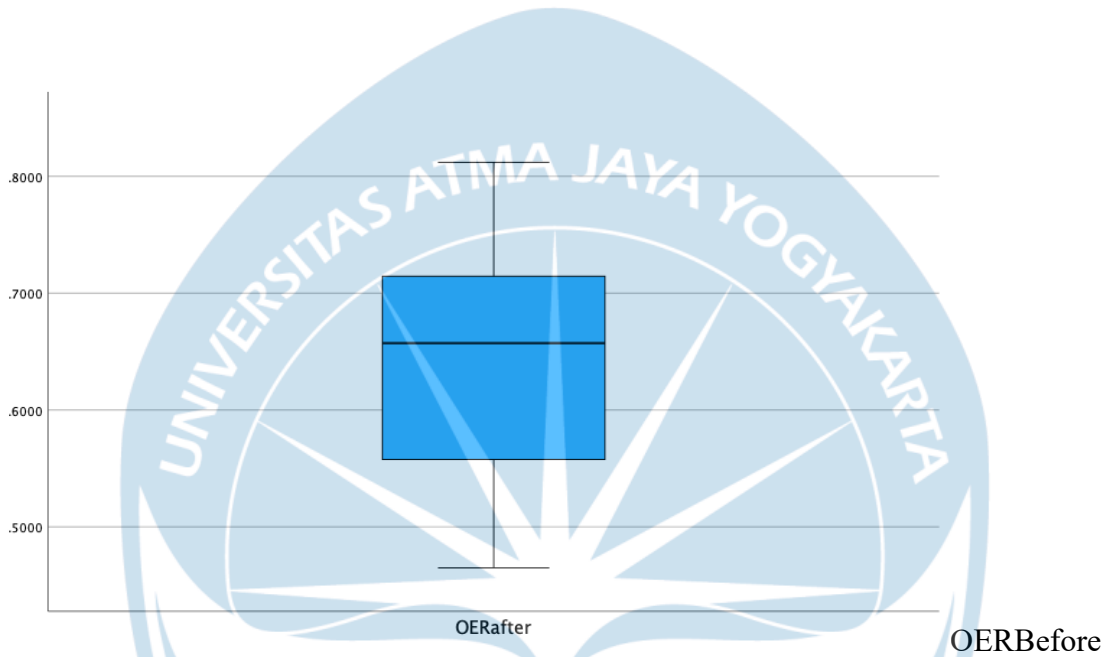
2.00 5 . 47

3.00 6 . 478

1.00 7 . 4

1.00 8 . 1

Stem width: .1000
 Each leaf: 1 case(s)

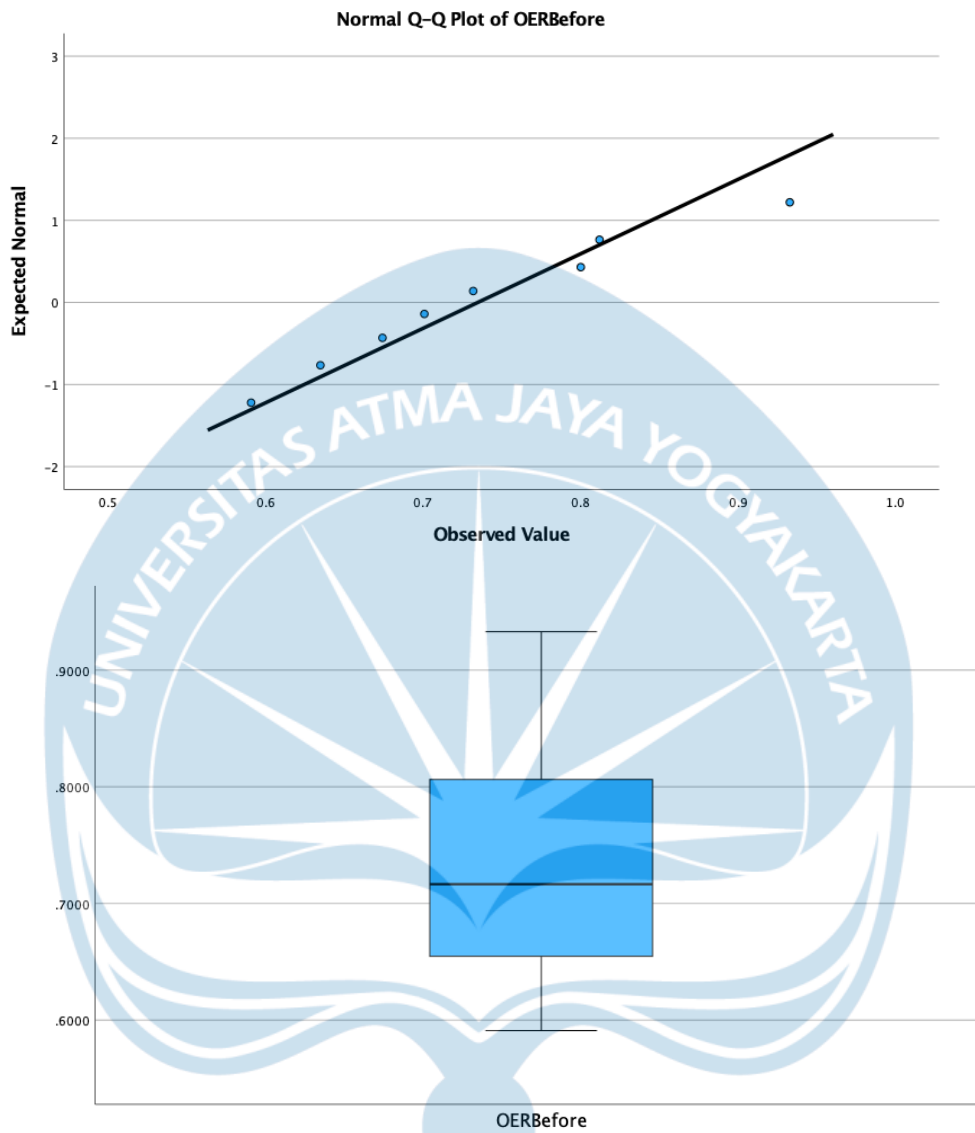


Stem-and-Leaf Plot

Frequency Stem & Leaf

1.00	5 . 9
2.00	6 . 37
2.00	7 . 03
2.00	8 . 01
1.00	9 . 3

Stem width: .1000
 Each leaf: 1 case(s)



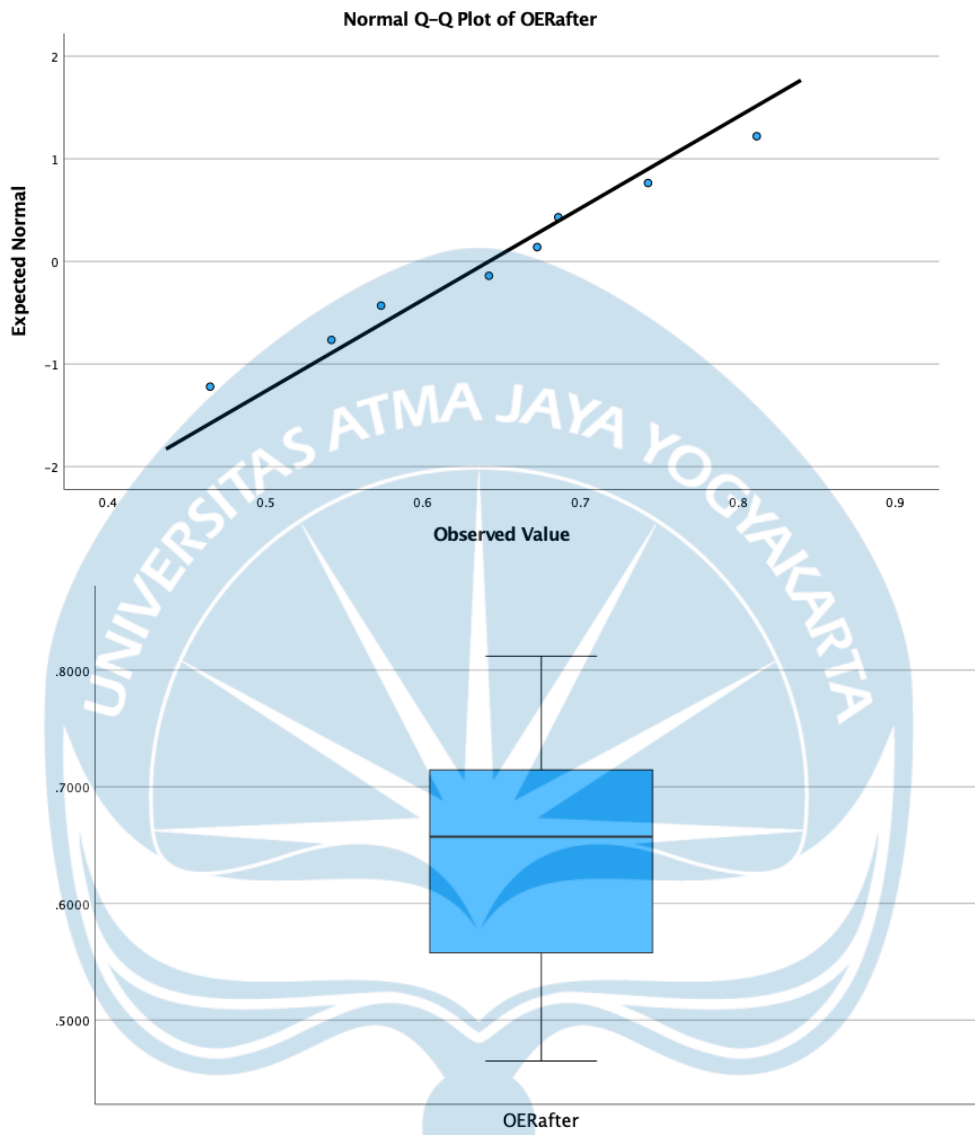
OERafter Stem-and-Leaf Plot

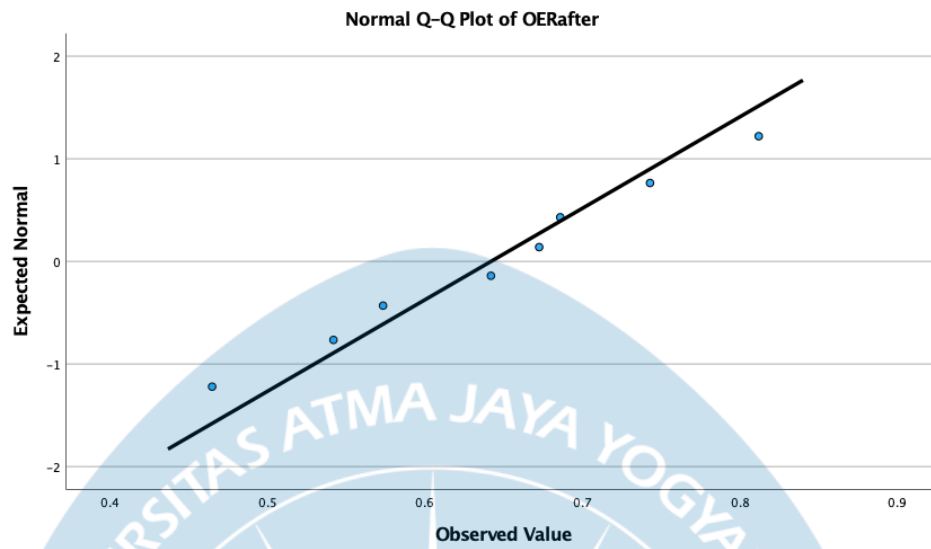
Frequency Stem & Leaf

1.00	4 . 6
2.00	5 . 47
3.00	6 . 478
1.00	7 . 4
1.00	8 . 1

Stem width: .1000
Each leaf: 1 case(s)







Paired Samples Effect Sizes

Pair 1	OERBefore - OERafter	Standardizer ^a	Point Estimate	95% Confidence Interval	
				Lower	Upper
	Cohen's d	.1264428	.734	-.074	1.504
	Hedges' correction	.1423581	.652	-.066	1.336

- a. The denominator used in estimating the effect sizes.
 Cohen's d uses the sample standard deviation of the mean difference.
 Hedges' correction uses the sample standard deviation of the mean difference, plus a correction factor.

Descriptives

		Statistic	Std. Error	
CARBefore	Mean	.214438	.0097859	
	95% Confidence Interval for Mean	Lower Bound	.191298	
		Upper Bound	.237577	
	5% Trimmed Mean	.214597		
	Median	.214550		
	Variance	.001		
	Std. Deviation	.0276787		
	Minimum	.1680		
	Maximum	.2580		
	Range	.0900		
	Interquartile Range	.0387		
	Skewness	-.110	.752	
	Kurtosis	.219	1.481	
	CARafter	Mean	.220163	.0101912
95% Confidence Interval for Mean		Lower Bound	.196064	
		Upper Bound	.244261	
5% Trimmed Mean		.219569		
Median		.210000		
Variance		.001		
Std. Deviation		.0288252		
Minimum		.1930		
Maximum		.2580		
Range		.0650		
Interquartile Range		.0585		
Skewness		.416	.752	
Kurtosis		-2.045	1.481	

CARBefore Stem-and-

Leaf Plot

Frequency Stem & Leaf

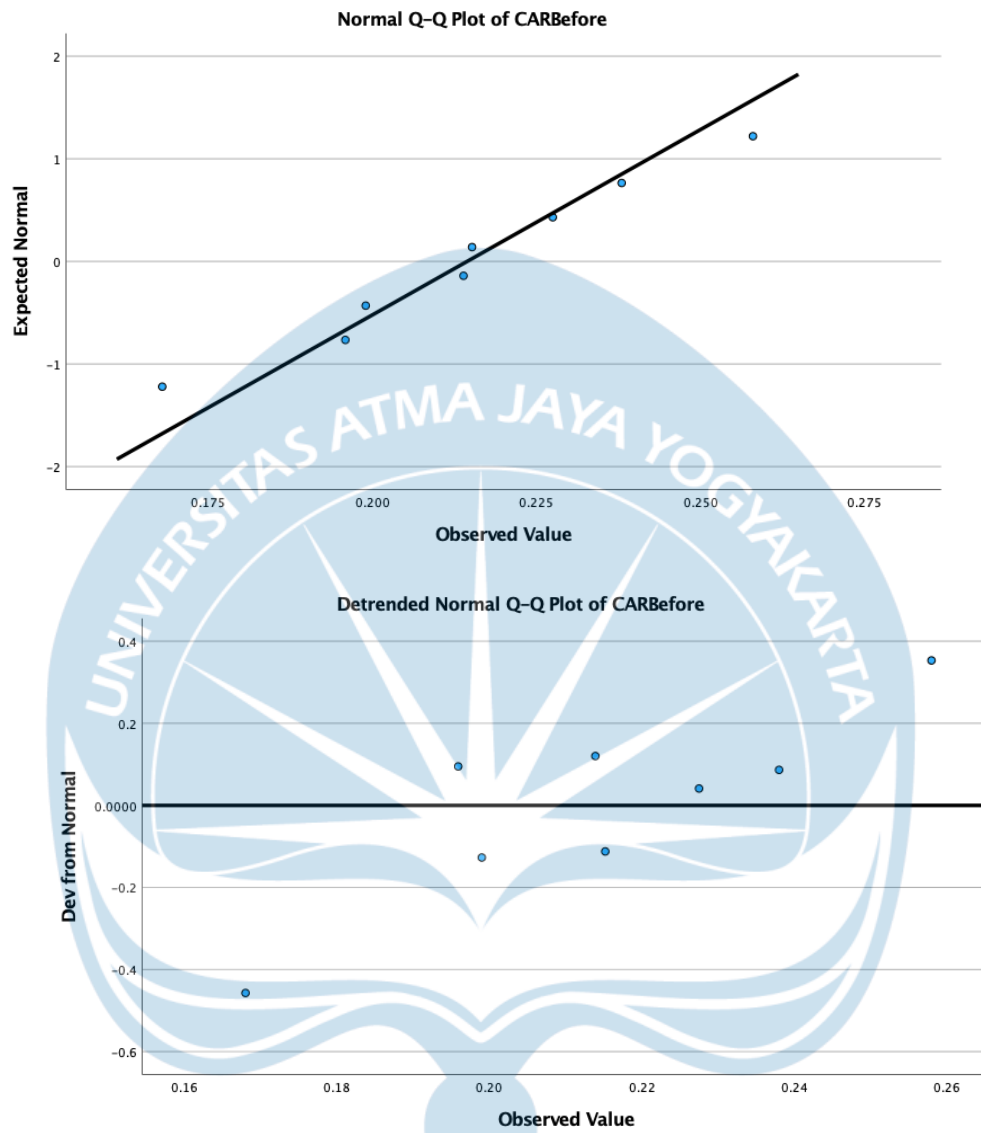
3.00 1 . 699

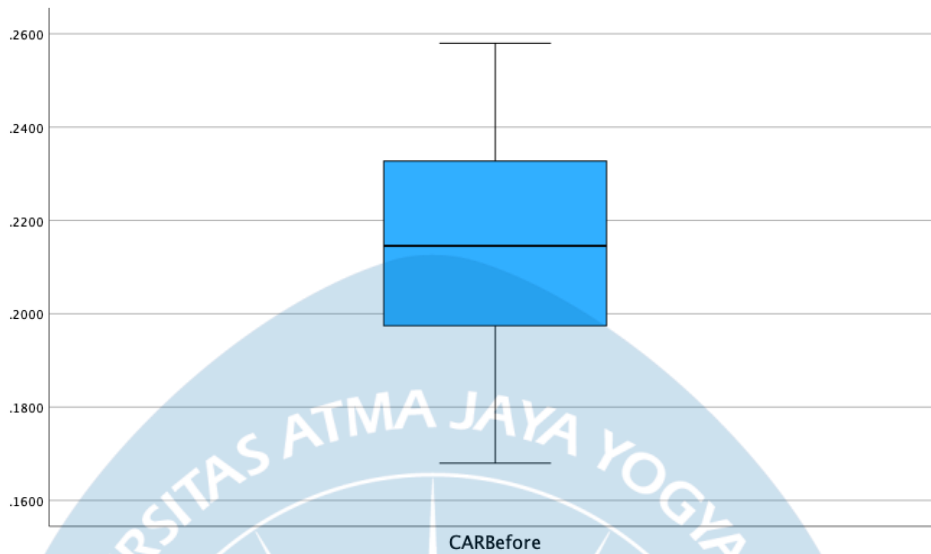
4.00 2 . 1123

1.00 2 . 5

Stem width: .1000

Each leaf: 1 case(s)



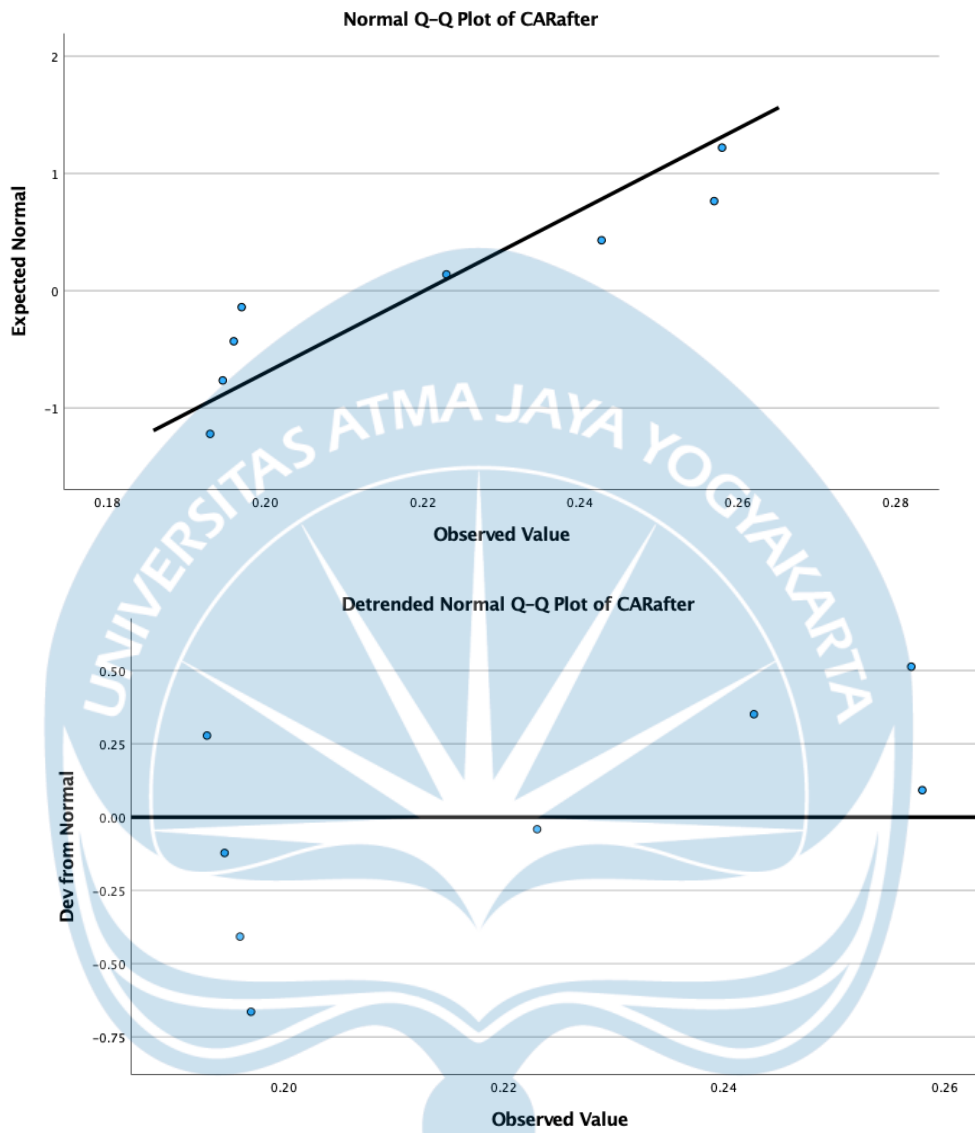


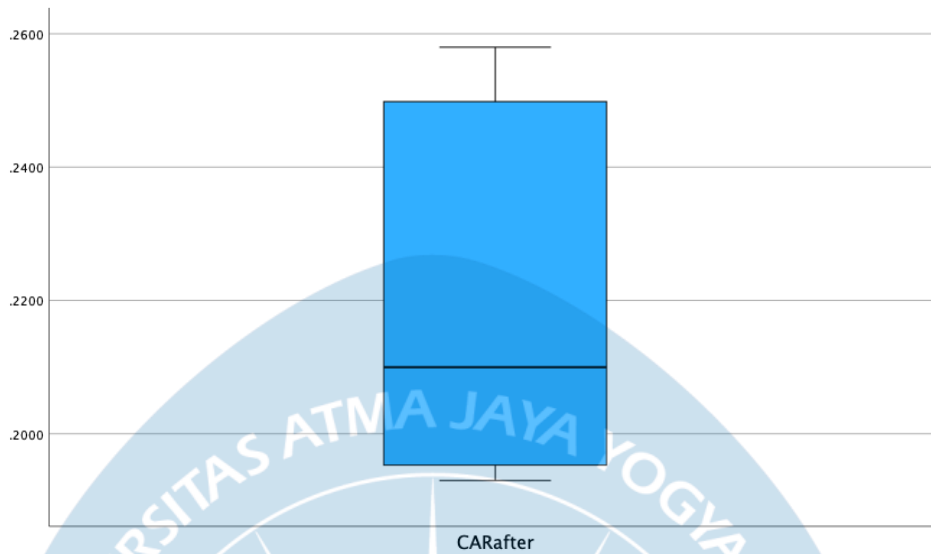
CARafter Stem-and-Leaf Plot

Frequency	Stem & Leaf
4.00	1 . 9999
2.00	2 . 24
2.00	2 . 55

Stem width: .1000

Each leaf: 1 case(s)





Paired Samples Effect Sizes

Pair 1	CARbefore - CARafter	Cohen's d	Standardizer ^a	Point Estimate	95% Confidence Interval	
					Lower	Upper
			.0223110	-.257	-.953	.457
		Hedges' correction	.0251193	-.228	-.847	.406

a. The denominator used in estimating the effect sizes.

Cohen's d uses the sample standard deviation of the mean difference.

Hedges' correction uses the sample standard deviation of the mean difference, plus a correction factor.