

## DAFTAR PUSTAKA

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## LAMPIRAN

### Lampiran 1. *Informed consent*

#### **FORMULIR PERSETUJUAN SETELAH PENJELASAN**

Saya yang bertandatangan di bawah ini :

Nama : .....  
Umur : .....  
Alamat : .....

setelah mendengar/membaca dan mengerti penjelasan yang diberikan mengenai tujuan, manfaat, dan apa yang akan dilakukan pada penelitian ini, menyatakan setuju untuk ikut dalam penelitian ini secara sukarela tanpa paksaan.

Saya tahu bahwa keikutsertaan saya ini bersifat sukarela tanpa paksaan, sehingga saya bisa menolak ikut atau mengundurkan diri dari penelitian ini. Saya berhak bertanya atau meminta penjelasan pada peneliti bila masih ada hal yang belum jelas atau masih ada hal yang ingin saya ketahui tentang penelitian ini.

Saya juga mengerti bahwa semua biaya yang dikeluarkan sehubungan dengan penelitian ini, akan ditanggung oleh peneliti. Saya percaya bahwa keamanan dan kerahasiaan data penelitian akan terjamin dan saya dengan ini menyetujui semua data saya yang dihasilkan pada penelitian ini untuk disajikan dalam bentuk lisan maupun tulisan.

Dengan membubuhkan tandatangan saya di bawah ini, saya menegaskan keikutsertaan saya secara sukarela dalam studi penelitian ini.

	<b>Nama</b>	<b>Tanda tangan</b>	<b>Tgl/Bln/Thn</b>
Responden	.....	.....	.....
/Wali	.....	.....	.....
Saksi	.....	.....	.....

(Tanda Tangan Saksi diperlukan hanya jika Partisipan tidak dapat memberikan consent/persetujuan sehingga menggunakan wali yang sah secara hukum, yaitu untuk partisipan berikut:

1. Berusia di bawah 18 tahun
2. Usia lanjut
3. Gangguan mental
4. Pasien tidak sadar
5. Dan lain-lain kondisi yang tidak memungkinkan memberikan persetujuan

## Lampiran 2. Surat Etik



KEMENTERIAN PENDIDIKAN, KEBUDAYAAN  
RISET, DAN TEKNOLOGI  
UNIVERSITAS HASANUDDIN  
FAKULTAS KESEHATAN MASYARAKAT  
Jln.Perintis Kemerdekaan Km.10 Makassar 90245, Telp.(0411) 585658,  
E-mail : [fk.unhas@gmail.com](mailto:fk.unhas@gmail.com), website: <https://fk.unhas.ac.id>

### REKOMENDASI PERSETUJUAN ETIK

Nomor :2672/UN4.14.1/TP.01.02/2023

Tanggal : 06 Maret 2023

Dengan ini Menyatakan bahwa Protokol dan Dokumen yang Berhubungan dengan Protokol berikut ini telah mendapatkan Persetujuan Etik :

No.Protokol	27223092051	No. Sponsor Protokol	
Peneliti Utama	<b>Ulfah Widyastuti Arsal</b>	Sponsor	Pribadi
Judul Peneliti	<b>Efektivitas <i>Backward Walking</i> Program terhadap Perubahan Kontrol Postural, Koordinasi Gerak, dan Resiko Jatuh Pada Lansia di Lembaga Kesejahteraan Sosial Batara Hati Mulia Kabupaten Gowa</b>		
No.Versi Protokol	1	Tanggal Versi	27 Februari 2023
No.Versi PSP	1	Tanggal Versi	27 Februari 2023
Tempat Penelitian	<b>Lembaga Kesejahteraan Sosial Batara Hati Mulia, Kabupaten Gowa</b>		
Judul Review	<input type="checkbox"/> Exempted <input checked="" type="checkbox"/> Expedited <input type="checkbox"/> Fullboard	Masa Berlaku <b>06 Maret 2023 Sampai 06 Maret 2024</b>	Frekuensi review lanjutan
Ketua Komisi Etik Penelitian	Nama : Prof.dr.Veni Hadju,M.Sc,Ph.D	Tanda tangan	 Tanggal 06 Maret 2023
Sekretaris komisi Etik Penelitian	Nama : Dr. Wahiduddin, SKM.,M.Kes	Tanda tangan	 Tanggal 06 Maret 2023

Kewajiban Peneliti Utama :

1. Menyerahkan Amandemen Protokol untuk persetujuan sebelum di implementasikan
2. Menyerahkan Laporan SAE ke Komisi Etik dalam 24 Jam dan dilengkapi dalam 7 hari dan Laporan SUSAR dalam 72 Jam setelah Peneliti Utama menerima laporan
3. Menyerahkan Laporan Kemajuan (progress report) setiap 6 bulan untuk penelitian resiko tinggi dan setiap setahun untuk penelitian resiko rendah
4. Menyerahkan laporan akhir setelah Penelitian berakhir
5. Melaporakn penyimpangan dari protocol yang disetujui (protocol deviation/violation)
6. Mematuhi semua peraturan yang ditentukan



## Lampiran 3. Surat Keterangan Telah Melakukan Penelitian



**YAYASAN BATARA HATI MULIA**  
**LEMBAGA KESEJAHTERAAN SOSIAL BATARA HATI MULIA**  
**SEKRETARIAT : JL. MALINO BTN BUMI BATARA GOWA BLOK E 20 NO.18**  
**KEL. TOMPOBALANG, KEC.SOMBA OPU, KAB. GOWA, PROP. SULAWESI SELATAN**  
**HP 085299564949 - 085242203097**

SURAT KETERANGAN

Nomor.

Yang bertanda tangan di bawah ini, Ketua Yayasan Batara Hati Mulia Kabupaten Gowa menerangkan bahwa:

Nama : Ulfah Widyastuti Aرسال  
Tempat/Tanggal Lahir : Bone-Bone Selayar, 10 Agustus 1996  
Alamat : Perumahan Nusa Mappala Gowa Blok B9 No 6

Bahwa nama yang telah disebutkan di atas benar telah menyelesaikan penelitian dengan judul “**Efektivitas *Backward Walking Program* Terhadap Perubahan Kontrol Postural, Koordinasi Gerak, Dan Resiko Jatuh Pada Lansia Di Lembaga Kesejahteraan Social Batara Hati Mulia Kabupaten Gowa**”.

Demikian surat keterangan ini dibuat untuk dipergunakan seperlunya.

Makassar, 6 April 2023

Ketua Yayasan Batara Hati Mulia

IRYANTI, SKM, S.ft, Physio

NIP.197100011996022005

## Lampiran 4. Hasil Analisis Data SPSS

### Uji Univariat BWP

#### Usia

		Frequenc y	Percent	Valid Percent	Cumulativ e Percent
Valid	60-65	26	65.0	65.0	65.0
	66-70	14	35.0	35.0	100.0
	Total	40	100.0	100.0	

#### JK

		Frequenc y	Percent	Valid Percent	Cumulativ e Percent
Valid	Laki-Laki	11	27.5	27.5	27.5
	Perempuan	29	72.5	72.5	100.0
	Total	40	100.0	100.0	

BWP

### Explore

#### Notes

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Missing Value Handling	Definition of Missing	User-defined missing values for dependent variables are treated as missing.
	Cases Used	Statistics are based on cases with no missing values for any dependent variable or factor used.



Syntax	EXAMINE VARIABLES=PreBBS PostBBS PreRomberg PostRomberg PreTUGT PostTUGT /PLOT BOXPLOT STEMLEAF NPLOT /COMPARE GROUPS /STATISTICS DESCRIPTIVES /CINTERVAL 95 /MISSING LISTWISE /NOTOTAL.
Resources	Processor Time 00:00:07,83 Elapsed Time 00:00:06,90

### Case Processing Summary

	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
PreBBS	20	100,0%	0	0,0%	20	100,0%
PostBBS	20	100,0%	0	0,0%	20	100,0%
PreRomberg	20	100,0%	0	0,0%	20	100,0%
PostRomberg	20	100,0%	0	0,0%	20	100,0%
PreTUGT	20	100,0%	0	0,0%	20	100,0%
PostTUGT	20	100,0%	0	0,0%	20	100,0%

### Descriptives

		Statistic	Std. Error	
PreBBS	Mean	11,60	1,122	
	95% Confidence Interval for Mean	Lower Bound	9,25	
		Upper Bound	13,95	
	5% Trimmed Mean	11,33		
	Median	10,00		
	Variance	25,200		
	Std. Deviation	5,020		
	Minimum	5		

	Maximum		23	
	Range		18	
	Interquartile Range		8	
	Skewness		,992	,512
	Kurtosis		,339	,992
PostBBS	Mean		20,20	1,187
	95% Confidence Interval for Mean	Lower Bound	17,72	
		Upper Bound	22,68	
	5% Trimmed Mean		20,22	
	Median		20,50	
	Variance		28,168	
	Std. Deviation		5,307	
	Minimum		12	
	Maximum		28	
	Range		16	
	Interquartile Range		10	
	Skewness		-,049	,512
	Kurtosis		-1,448	,992
	PreRomberg	Mean		1,30
95% Confidence Interval for Mean		Lower Bound	1,08	
		Upper Bound	1,52	
5% Trimmed Mean			1,28	
Median			1,00	
Variance			,221	
Std. Deviation			,470	
Minimum			1	
Maximum			2	
Range			1	
Interquartile Range			1	
Skewness			,945	,512
Kurtosis			-1,242	,992
PostRomberg		Mean		1,80
	95% Confidence Interval for Mean	Lower Bound	1,61	
		Upper Bound	1,99	
	5% Trimmed Mean		1,83	
	Median		2,00	
	Variance		,168	
	Std. Deviation		,410	
	Minimum		1	

	Maximum		2	
	Range		1	
	Interquartile Range		0	
	Skewness		-1,624	,512
	Kurtosis		,699	,992
PreTUGT	Mean		16,10	1,121
	95% Confidence Interval for Mean	Lower Bound	13,75	
		Upper Bound	18,45	
	5% Trimmed Mean		15,94	
	Median		16,00	
	Variance		25,147	
	Std. Deviation		5,015	
	Minimum		9	
	Maximum		26	
	Range		17	
	Interquartile Range		9	
	Skewness		,449	,512
	Kurtosis		-,597	,992
	PostTUGT	Mean		8,45
95% Confidence Interval for Mean		Lower Bound	7,67	
		Upper Bound	9,23	
5% Trimmed Mean			8,33	
Median			8,00	
Variance			2,787	
Std. Deviation			1,669	
Minimum			6	
Maximum			13	
Range			7	
Interquartile Range			2	
Skewness			1,454	,512
Kurtosis			2,484	,992

### Tests of Normality

	Kolmogorov-Smirnov <sup>a</sup>			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
PreBBS	,175	20	,110	,901	20	,043
PostBBS	,186	20	,069	,923	20	,112
PreRomberg	,438	20	,000	,580	20	,000

PostRomberg	,487	20	,000	,495	20	,000
PreTUGT	,095	20	,200*	,952	20	,403
PostTUGT	,256	20	,001	,842	20	,004

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

a. Lilliefors Significance Correction

### Notes

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Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics for each test are based on all cases with valid data for the variable(s) used in that test.
Syntax	NPAR TESTS /WILCOXON=PreBBS WITH PostBBS (PAIRED) /MISSING ANALYSIS.	
Resources	Processor Time	00:00:00,02
	Elapsed Time	00:00:00,05
	Number of Cases Allowed <sup>a</sup>	224694

a. Based on availability of workspace memory.

## Wilcoxon Signed Ranks Test

### Ranks

		N	Mean Rank	Sum of Ranks
PostBBS - PreBBS	Negatif Ranks	0 <sup>a</sup>	,00	,00
	Positive Ranks	20 <sup>b</sup>	10,50	210,00
	Ties	0 <sup>c</sup>		
	Total	20		

a. PostBBS < PreBBS

b. PostBBS > PreBBS

c. PostBBS = PreBBS

### Test Statistics<sup>a</sup>

PostBBS - PreBBS	
Z	-3,930 <sup>b</sup>
Asymp. Sig. (2-tailed)	,000

a. Wilcoxon Signed Ranks Test

b. Based on negatif ranks.

### NPAR TESTS

/WILCOXON=PreRomberg WITH PostRomberg (PAIRED)  
/MISSING ANALYSIS.

### NPar Tests

### Notes

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Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics for each test are based on all cases with valid data for the variable(s) used in that test.
Syntax		NPAR TESTS /WILCOXON=PreRomberg WITH PostRomberg (PAIRED) /MISSING ANALYSIS.
Resources	Processor Time	00:00:00,00
	Elapsed Time	00:00:00,06
	Number of Cases Allowed <sup>a</sup>	224694

a. Based on availability of workspace memory.

### Case Processing Summary

	Valid		Cases Missing		Total	
	N	Percent	N	Percent	N	Percent
PreBBS	20	50,0%	20	50,0%	40	100,0%
PostBBS	20	50,0%	20	50,0%	40	100,0%
PreRomberg	20	50,0%	20	50,0%	40	100,0%
PostRomberg	20	50,0%	20	50,0%	40	100,0%
PreTUGT	20	50,0%	20	50,0%	40	100,0%
PostTUGT	20	50,0%	20	50,0%	40	100,0%

### Descriptives

		Statistic	Std. Error
PreBBS	Mean	15,00	1,811
	95% Confidence Interval for Mean	Lower Bound	11,21
		Upper Bound	18,79
	5% Trimmed Mean	14,83	
	Median	13,00	

	Variance		65,579	
	Std. Deviation		8,098	
	Minimum		5	
	Maximum		28	
	Range		23	
	Interquartile Range		17	
	Skewness		,491	,512
	Kurtosis		-1,366	,992
PostBBS	Mean		14,75	1,679
	95% Confidence Interval for	Lower Bound	11,23	
	Mean	Upper Bound	18,27	
	5% Trimmed Mean		14,50	
	Median		12,50	
	Variance		56,408	
	Std. Deviation		7,511	
	Minimum		6	
	Maximum		28	
	Range		22	
	Interquartile Range		13	
	Skewness		,813	,512
	Kurtosis		-,816	,992
PreRomberg	Mean		1,55	,114
	95% Confidence Interval for	Lower Bound	1,31	
	Mean	Upper Bound	1,79	
	5% Trimmed Mean		1,56	
	Median		2,00	
	Variance		,261	
	Std. Deviation		,510	
	Minimum		1	
	Maximum		2	
	Range		1	
	Interquartile Range		1	
	Skewness		-,218	,512
	Kurtosis		-2,183	,992
PostRomberg	Mean		1,45	,114
	95% Confidence Interval for	Lower Bound	1,21	
	Mean	Upper Bound	1,69	
	5% Trimmed Mean		1,44	
	Median		1,00	

	Variance		,261	
	Std. Deviation		,510	
	Minimum		1	
	Maximum		2	
	Range		1	
	Interquartile Range		1	
	Skewness		,218	,512
	Kurtosis		-2,183	,992
PreTUGT	Mean		13,40	1,184
	95% Confidence Interval for Mean	Lower Bound	10,92	
		Upper Bound	15,88	
	5% Trimmed Mean		13,11	
	Median		13,00	
	Variance		28,042	
	Std. Deviation		5,295	
	Minimum		7	
	Maximum		25	
	Range		18	
	Interquartile Range		9	
	Skewness		,545	,512
	Kurtosis		-,627	,992
PostTUGT	Mean		12,25	,946
	95% Confidence Interval for Mean	Lower Bound	10,27	
		Upper Bound	14,23	
	5% Trimmed Mean		12,06	
	Median		12,00	
	Variance		17,882	
	Std. Deviation		4,229	
	Minimum		6	
	Maximum		22	
	Range		16	
	Interquartile Range		6	
	Skewness		,707	,512
	Kurtosis		,212	,992

### Tests of Normality

Kolmogorov-Smirnov <sup>a</sup>			Shapiro-Wilk		
Statistic	df	Sig.	Statistic	df	Sig.



PreBBS	,167	20	,146	,872	20	,013
PostBBS	,190	20	,057	,854	20	,006
PreRomberg	,361	20	,000	,637	20	,000
PostRomberg	,361	20	,000	,637	20	,000
PreTUGT	,147	20	,200*	,928	20	,144
PostTUGT	,130	20	,200*	,950	20	,361

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

a. Lilliefors Significance Correction

## Wilcoxon Signed Ranks Test

		Ranks		
		N	Mean Rank	Sum of Ranks
PostRomberg - PreRomberg	Negatif Ranks	0 <sup>a</sup>	,00	,00
	Positive Ranks	10 <sup>b</sup>	5,50	55,00
	Ties	10 <sup>c</sup>		
	Total	20		

a. PostRomberg < PreRomberg

b. PostRomberg > PreRomberg

c. PostRomberg = PreRomberg

### Test Statistics<sup>a</sup>

PostRomberg – PreRomberg	
Z	-3,162 <sup>b</sup>
Asymp. Sig. (2-tailed)	,002

a. Wilcoxon Signed Ranks Test

b. Based on negatif ranks.

### NPAR TESTS

/WILCOXON=PreTUGT WITH PostTUGT (PAIRED)  
/MISSING ANALYSIS.

## NPar Tests

Notes		
Output Created		29-MAY-2023 11:34:30
Comments		
Input	Active Dataset	DataSet1
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	20
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics for each test are based on all cases with valid data for the variable(s) used in that test.
Syntax		NPAR TESTS /WILCOXON=PreTUGT WITH PostTUGT (PAIRED) /MISSING ANALYSIS.
Resources	Processor Time	00:00:00,00
	Elapsed Time	00:00:00,00
	Number of Cases Allowed <sup>a</sup>	224694

a. Based on availability of workspace memory.

## Wilcoxon Signed Ranks Test

Ranks			
	N	Mean Rank	Sum of Ranks
PostTUGT - PreTUGT	20 <sup>a</sup>	10,50	210,00
Negatif Ranks			

	Positive Ranks	0 <sup>b</sup>	,00	,00
	Ties	0 <sup>c</sup>		
	Total	20		

- a. PostTUGT < PreTUGT
- b. PostTUGT > PreTUGT
- c. PostTUGT = PreTUGT

### Test Statistics<sup>a</sup>

	PostTUGT – PreTUGT
Z	-3,927 <sup>b</sup>
Asymp. Sig. (2-tailed)	,000

- a. Wilcoxon Signed Ranks Test
- b. Based on positive ranks.

Senam Lansia

## Explore

### Notes

Output Created	29-MAY-2023 11:41:21	
Comments		
Input	Active Dataset	DataSet0
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	40
Missing Value Handling	Definition of Missing	User-defined missing values for dependent variables are treated as missing.
	Cases Used	Statistics are based on cases with no missing values for any dependent variable or factor used.

Syntax	EXAMINE VARIABLES=PreBBS PostBBS PreRomberg PostRomberg PreTUGT PostTUGT /PLOT BOXPLOT STEMLEAF NPLOT /COMPARE GROUPS /STATISTICS DESCRIPTIVES /INTERVAL 95 /MISSING LISTWISE /NOTOTAL.	
Resources	Processor Time	00:00:07,33
	Elapsed Time	00:00:07,19

[DataSet0]

### Case Processing Summary

	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
PreBBS	20	50,0%	20	50,0%	40	100,0%
PostBBS	20	50,0%	20	50,0%	40	100,0%
PreRomberg	20	50,0%	20	50,0%	40	100,0%
PostRomberg	20	50,0%	20	50,0%	40	100,0%
PreTUGT	20	50,0%	20	50,0%	40	100,0%
PostTUGT	20	50,0%	20	50,0%	40	100,0%

### Descriptives

		Statistic	Std. Error
PreBBS	Mean	15,00	1,811
	95% Confidence Interval for	Lower Bound	11,21
	Mean	Upper Bound	18,79
	5% Trimmed Mean		14,83
	Median		13,00

	Variance		65,579	
	Std. Deviation		8,098	
	Minimum		5	
	Maximum		28	
	Range		23	
	Interquartile Range		17	
	Skewness		,491	,512
	Kurtosis		-1,366	,992
PostBBS	Mean		14,75	1,679
	95% Confidence Interval for	Lower Bound	11,23	
	Mean	Upper Bound	18,27	
	5% Trimmed Mean		14,50	
	Median		12,50	
	Variance		56,408	
	Std. Deviation		7,511	
	Minimum		6	
	Maximum		28	
	Range		22	
	Interquartile Range		13	
	Skewness		,813	,512
	Kurtosis		-,816	,992
PreRomberg	Mean		1,55	,114
	95% Confidence Interval for	Lower Bound	1,31	
	Mean	Upper Bound	1,79	
	5% Trimmed Mean		1,56	
	Median		2,00	
	Variance		,261	
	Std. Deviation		,510	
	Minimum		1	
	Maximum		2	
	Range		1	
	Interquartile Range		1	
	Skewness		-,218	,512
	Kurtosis		-2,183	,992
PostRomberg	Mean		1,45	,114
	95% Confidence Interval for	Lower Bound	1,21	
	Mean	Upper Bound	1,69	
	5% Trimmed Mean		1,44	
	Median		1,00	

	Variance		,261	
	Std. Deviation		,510	
	Minimum		1	
	Maximum		2	
	Range		1	
	Interquartile Range		1	
	Skewness		,218	,512
	Kurtosis		-2,183	,992
PreTUGT	Mean		13,40	1,184
	95% Confidence Interval for Mean	Lower Bound	10,92	
		Upper Bound	15,88	
	5% Trimmed Mean		13,11	
	Median		13,00	
	Variance		28,042	
	Std. Deviation		5,295	
	Minimum		7	
	Maximum		25	
	Range		18	
	Interquartile Range		9	
	Skewness		,545	,512
	Kurtosis		-,627	,992
	PostTUGT	Mean		12,25
95% Confidence Interval for Mean		Lower Bound	10,27	
		Upper Bound	14,23	
5% Trimmed Mean			12,06	
Median			12,00	
Variance			17,882	
Std. Deviation			4,229	
Minimum			6	
Maximum			22	
Range			16	
Interquartile Range			6	
Skewness			,707	,512
Kurtosis			,212	,992

### Tests of Normality

Kolmogorov-Smirnov <sup>a</sup>			Shapiro-Wilk		
Statistic	df	Sig.	Statistic	df	Sig.

PreBBS	,167	20	,146	,872	20	,013
PostBBS	,190	20	,057	,854	20	,006
PreRomberg	,361	20	,000	,637	20	,000
PostRomberg	,361	20	,000	,637	20	,000
PreTUGT	,147	20	,200*	,928	20	,144
PostTUGT	,130	20	,200*	,950	20	,361

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

a. Lilliefors Significance Correction

## NPar Tests

### Notes

Output Created		29-MAY-2023 11:19:11
Comments		
Input	Active Dataset	DataSet0
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	40
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics for each test are based on all cases with valid data for the variable(s) used in that test.
Syntax	NPAR TESTS /WILCOXON=PreBBS WITH PostBBS (PAIRED) /MISSING ANALYSIS.	
Resources	Processor Time	00:00:00,00
	Elapsed Time	00:00:00,02
	Number of Cases Allowed <sup>a</sup>	224694

a. Based on availability of workspace memory.

## Wilcoxon Signed Ranks Test

		Ranks		
		N	Mean Rank	Sum of Ranks
PostBBS - PreBBS	Negatif Ranks	3 <sup>a</sup>	8,67	26,00
	Positive Ranks	7 <sup>b</sup>	4,14	29,00
	Ties	10 <sup>c</sup>		
	Total	20		

a. PostBBS < PreBBS

b. PostBBS > PreBBS

c. PostBBS = PreBBS

### Test Statistics<sup>a</sup>

	PostBBS – PreBBS
Z	-,154 <sup>b</sup>
Asymp. Sig. (2-tailed)	,878

a. Wilcoxon Signed Ranks Test

b. Based on negatif ranks.

### NPAR TESTS

/WILCOXON=PreBBS WITH PostBBS (PAIRED)

/MISSING ANALYSIS.

## NPar Tests

### Notes

Output Created	29-MAY-2023 11:43:14	
Comments		
Input	Active Dataset	DataSet0
	Filter	<none>



	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	40
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics for each test are based on all cases with valid data for the variable(s) used in that test.
Syntax		NPAR TESTS /WILCOXON=PreRomberg WITH PostRomberg (PAIRED) /MISSING ANALYSIS.
Resources	Processor Time	00:00:00,03
	Elapsed Time	00:00:00,03
	Number of Cases Allowed <sup>a</sup>	224694

a. Based on availability of workspace memory.

## Wilcoxon Signed Ranks Test

		Ranks		
		N	Mean Rank	Sum of Ranks
PostRomberg - PreRomberg	Negatif Ranks	3 <sup>a</sup>	2,50	7,50
	Positive Ranks	1 <sup>b</sup>	2,50	2,50
	Ties	16 <sup>c</sup>		
	Total	20		

a. PostRomberg < PreRomberg

b. PostRomberg > PreRomberg

c. PostRomberg = PreRomberg

### Test Statistics<sup>a</sup>

	PostRomberg - PreRomberg
Z	-1,000 <sup>b</sup>
Asymp. Sig. (2-tailed)	,317

- a. Wilcoxon Signed Ranks Test  
b. Based on positive ranks.

T-TEST PAIRS=PreTUGT WITH PostTUGT (PAIRED)  
/CRITERIA=CI(.9500)  
/MISSING=ANALYSIS.

## T-Test

### Notes

Output Created	29-MAY-2023 11:43:58	
Comments		
Input	Active Dataset	DataSet0
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	40
Missing Value Handling	Definition of Missing	User defined missing values are treated as missing.
	Cases Used	Statistics for each analysis are based on the cases with no missing or out-of-range data for any variable in the analysis.
Syntax	T-TEST PAIRS=PreTUGT WITH PostTUGT (PAIRED) /CRITERIA=CI(.9500) /MISSING=ANALYSIS.	
Resources	Processor Time	00:00:00,03
	Elapsed Time	00:00:00,04

### Paired Samples Statistics

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	PreTUGT	13,40	20	5,295	1,184
	PostTUGT	12,25	20	4,229	,946

### Paired Samples Correlations

		N	Correlation	Sig.
Pair 1	PreTUGT & PostTUGT	20	,877	,000

### Paired Samples Test

		Paired Differences			95% Confidence Interval of the Difference
		Mean	Std. Deviation	Std. Error Mean	Lower
Pair 1	PreTUGT - PostTUGT	1,150	2,581	,577	-,058

### Paired Samples Test

		Paired Differences			
		95% Confidence Interval of the Difference			
		Upper	t	df	Sig. (2-tailed)
Pair 1	PreTUGT - PostTUGT	2,358	1,993	19	,061

Mann Whitney

### NPar Tests

### Notes

Output Created	29-MAY-2023 12:26:16	
Comments		
Input	Active Dataset	DataSet2
	Filter	<none>

	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	40
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics for each test are based on all cases with valid data for the variable(s) used in that test.
Syntax		NPAR TESTS /M-W= BBS BY Group(1 2) /MISSING ANALYSIS.
Resources	Processor Time	00:00:00,02
	Elapsed Time	00:00:00,01
	Number of Cases Allowed <sup>a</sup>	224694

a. Based on availability of workspace memory.

## Mann-Whitney Test

		Ranks		
	Group	N	Mean Rank	Sum of Ranks
BBS	BWP	20	28,60	572,00
	Senam Lansia	20	12,40	248,00
	Total	40		

### Test Statistics<sup>a</sup>

BBS	
Mann-Whitney U	38,000
Wilcoxon W	248,000
Z	-4,426
Asymp. Sig. (2-tailed)	,000
Exact Sig. [2*(1-tailed Sig.)]	,000 <sup>p</sup>

- a. Grouping Variable: Group
- b. Not corrected for ties.

NPART TESTS  
 /M-W= Romberg BY Group1(1 2)  
 /MISSING ANALYSIS.

## NPar Tests

Notes		
Output Created		29-MAY-2023 12:29:40
Comments		
Input	Active Dataset	DataSet2
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	40
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics for each test are based on all cases with valid data for the variable(s) used in that test.
Syntax		NPART TESTS /M-W= Romberg BY Group1(1 2) /MISSING ANALYSIS.
Resources	Processor Time	00:00:00,00
	Elapsed Time	00:00:00,01
	Number of Cases Allowed <sup>a</sup>	224694

- a. Based on availability of workspace memory.

## Mann-Whitney Test

		Ranks		
	Group1	N	Mean Rank	Sum of Ranks
Romberg	BWP	20	25,75	515,00
	Senam Lansia	20	15,25	305,00
	Total	40		

### Test Statistics<sup>a</sup>

		Romberg
Mann-Whitney U		95,000
Wilcoxon W		305,000
Z		-3,384
Asymp. Sig. (2-tailed)		,001
Exact Sig. [2*(1-tailed Sig.)]		,004 <sup>b</sup>

a. Grouping Variable: Group1

b. Not corrected for ties.

### NPAR TESTS

/M-W= TUGT BY Group(1 2)

/MISSING ANALYSIS.

## NPar Tests

### Notes

Output Created	29-MAY-2023 12:30:57	
Comments		
Input	Active Dataset	DataSet2
	Filter	<none>
	Weight	<none>
	Split File	<none>

	N of Rows in Working Data File	40
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics for each test are based on all cases with valid data for the variable(s) used in that test.
Syntax		NPAR TESTS /M-W= TUGT BY Group(1 2) /MISSING ANALYSIS.
Resources	Processor Time	00:00:00,02
	Elapsed Time	00:00:00,01
	Number of Cases Allowed <sup>a</sup>	224694

a. Based on availability of workspace memory.

## Mann-Whitney Test

		Ranks		
	Group	N	Mean Rank	Sum of Ranks
TUGT	BWP	20	28,80	576,00
	Senam Lansia	20	12,20	244,00
	Total	40		

### Test Statistics<sup>a</sup>

	TUGT
Mann-Whitney U	34,000
Wilcoxon W	244,000
Z	-4,521
Asymp. Sig. (2-tailed)	,000
Exact Sig. [2*(1-tailed Sig.)]	,000 <sup>p</sup>

a. Grouping Variable: Group

b. Not corrected for ties.

## Explore

### Notes

Output Created		08-JUN-2023 09:42:05
Comments		
Input	Data	E:\tesis\Untitled3.sav
	Active Dataset	DataSet1
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	40
Missing Value Handling	Definition of Missing	User-defined missing values for dependent variables are treated as missing.
	Cases Used	Statistics are based on cases with no missing values for any dependent variable or factor used.



Syntax		EXAMINE VARIABLES=BBS Romberg TUGT  /PLOT BOXPLOT STEMLEAF  /COMPARE GROUPS  /STATISTICS DESCRIPTIVES  /CINTERVAL 95  /MISSING LISTWISE  /NOTOTAL.
Resources	Processor Time	00:00:04,12
	Elapsed Time	00:00:06,27

[DataSet1] E:\tesis\Untitled3.sav

### Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
BBS	40	100,0%	0	0,0%	40	100,0%
Romberg	40	100,0%	0	0,0%	40	100,0%
TUGT	40	100,0%	0	0,0%	40	100,0%

### Descriptives

		Statistic	Std. Error	
BBS	Mean	5,70	,771	
	95% Confidence Interval for Mean	Lower Bound	4,14	
		Upper Bound	7,26	
	5% Trimmed Mean	5,53		
	Median	5,50		
	Variance	23,754		
	Std. Deviation	4,874		
	Minimum	0		
	Maximum	15		
	Range	15		
	Interquartile Range	10		
	Skewness	,328	,374	
	Kurtosis	-1,247	,733	
	Romberg	Mean	,20	,089
95% Confidence Interval for Mean		Lower Bound	,02	
		Upper Bound	,38	
5% Trimmed Mean		,22		
Median		,00		
Variance		,318		
Std. Deviation		,564		
Minimum		-1		
Maximum		1		
Range		2		
Interquartile Range		1		
Skewness		,036	,374	

	Kurtosis		-,060	,733
TUGT	Mean		4,95	,664
	95% Confidence Interval for Mean	Lower Bound	3,61	
		Upper Bound	6,29	
	5% Trimmed Mean		4,58	
	Median		3,00	
	Variance		17,638	
	Std. Deviation		4,200	
	Minimum		0	
	Maximum		17	
	Range		17	
	Interquartile Range		5	
	Skewness		1,165	,374
	Kurtosis		,997	,733
	Output Created		08-JUN-2023 09:47:43	
Comments				
Input	Data	E:\tesis\Untitled3.sav		
	Active Dataset	DataSet1		
	Filter	<none>		
	Weight	<none>		
	Split File	<none>		
	N of Rows in Working Data File	40		
Missing Value Handling	Definition of Missing	User-defined missing values for dependent variables are treated as missing.		

Cases Used		Statistics are based on cases with no missing values for any dependent variable or factor used.
Syntax		EXAMINE VARIABLES=BBS Romberg TUGT BBSSL RombergSL TUGTSL  /PLOT BOXPLOT STEMLEAF  /COMPARE GROUPS  /STATISTICS DESCRIPTIVES  /CINTERVAL 95  /MISSING LISTWISE  /NOTOTAL.
Resources	Processor Time	00:00:05,33
	Elapsed Time	00:00:02,95

### Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
BBS	20	50,0%	20	50,0%	40	100,0%
Romberg	20	50,0%	20	50,0%	40	100,0%
TUGT	20	50,0%	20	50,0%	40	100,0%
BBSSL	20	50,0%	20	50,0%	40	100,0%
RombergSL	20	50,0%	20	50,0%	40	100,0%
TUGTSL	20	50,0%	20	50,0%	40	100,0%

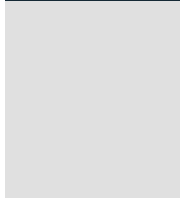
### Descriptives

		Statistic	Std. Error	
BBS	Mean	9,05	,838	
	95% Confidence Interval for Mean	Lower Bound	7,30	
		Upper Bound	10,80	
	5% Trimmed Mean	9,11		
	Median	8,50		
	Variance	14,050		
	Std. Deviation	3,748		
	Minimum	2		
	Maximum	15		
	Range	13		
	Interquartile Range	6		
	Skewness	-,137	,512	
	Kurtosis	-1,150	,992	
	Romberg	Mean	,50	,115
95% Confidence Interval for Mean		Lower Bound	,26	
		Upper Bound	,74	
5% Trimmed Mean		,50		
Median		,50		
Variance		,263		
Std. Deviation		,513		
Minimum		0		
Maximum		1		

	Range		1	
	Interquartile Range		1	
	Skewness		,000	,512
	Kurtosis		-2,235	,992
TUGT	Mean		7,70	,929
	95% Confidence Interval for Mean	Lower Bound	5,75	
		Upper Bound	9,65	
	5% Trimmed Mean		7,50	
	Median		7,00	
	Variance		17,274	
	Std. Deviation		4,156	
	Minimum		2	
	Maximum		17	
	Range		15	
	Interquartile Range		7	
	Skewness		,691	,512
	Kurtosis		,239	,992
	BBSSL	Mean		2,35
95% Confidence Interval for Mean		Lower Bound	,79	
		Upper Bound	3,91	
5% Trimmed Mean			2,00	
Median			1,00	
Variance			11,082	
Std. Deviation			3,329	
Minimum			0	
Maximum			11	

	Range		11	
	Interquartile Range		3	
	Skewness		1,524	,512
	Kurtosis		1,464	,992
RombergSL	Mean		-,10	,100
	95% Confidence Interval for Mean	Lower Bound	-,31	
		Upper Bound	,11	
	5% Trimmed Mean		-,11	
	Median		,00	
	Variance		,200	
	Std. Deviation		,447	
	Minimum		-1	
	Maximum		1	
	Range		2	
	Interquartile Range		0	
	Skewness		-,549	,512
	Kurtosis		2,663	,992
	TUGTSL	Mean		2,20
95% Confidence Interval for Mean		Lower Bound	1,39	
		Upper Bound	3,01	
5% Trimmed Mean			2,06	
Median			2,00	
Variance			3,011	
Std. Deviation			1,735	
Minimum			0	
Maximum			7	

Range	7	
Interquartile Range	2	
Skewness	1,271	,512
Kurtosis	1,828	,992





Lampiran 5. Dokumentasi



## Lampiran 6. Riwayat Hidup

### RIWAYAT HIDUP PENULIS

#### Identitas Pribadi

Nama : Ulfah Widyastuti Aرسال  
Tempat/Tanggal Lahir: Bone-Bone Selayar, 10 Agustus 1996  
Alamat : Perumahan Nusa Mappala Gowa Blok B9 No. 6  
Email : [widyastutiulfah@gmail.com](mailto:widyastutiulfah@gmail.com)  
Jurusan : Ilmu Biomedik Konsentrasi Fisiologi  
Fakultas : Kedokteran  
Nama Ayah : Salehuddin, S.Pd, MM  
Nama Ibu : Anri Opu

#### Riwayat Pendidikan

1. 2002-2008 : SD Inpres Onto
2. 2008-2011 : SMPN 2 Bontomatene
3. 2011-2014 : SMAN 2 Bontomatene
4. 2015-2019 : S1 Fisioterapi Universitas Hasanuddin
5. 2019-2021 : Profesi Fisioterapi Universitas Hasanuddin
6. 2021-2023 : S2 Ilmu Biomedik Konsentrasi Fisiologi Universitas Hasanuddin