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## LAMPIRAN

### *Lampiran 1.* Informed Consent

#### **INFORMED CONCENT**

Yang bertanda tangan dibawah ini

Nama : Noerhanna Dasati

Nim : C13115505

Saya mahasiswa Program Studi Fisioterapi Fakultas Keperawatan, Universitas Hasanuddin, yang sedang melakukan penelitian tentang “Pengaruh pemberian *concentric strengthening exercise* terhadap perubahan *foot alignment, malleolus height* dan tingkat *agility* pada pemain bulu tangkis junior di Kota Makassar”. Penelitian ini dilakukan sebagai tahap akhir dalam penyelesaian studi di Program Studi Fisioterapi S1 Profesi Fakultas Keperawatan, Universitas Hasanuddin.

Pernyataan ini dibuat sebagai lembar persetujuan untuk mengikuti proses penelitian saya dari awal hingga akhir penelitian nanti. Sehubungan dengan hal tersebut, saya dengan ini meminta kesediaan partisipasi saudara dalam penelitian ini bersifat bebas untuk menjadi responden atau menolak tanpa ada sanksi apapun. Saya akan menjamin kerahasiaan identitas saudara.

Partisipasi saudara dalam penelitian ini sangat kami hargai dan atas partisipasinya saya ucapkan terimakasih.

Makassar, Januari 2019

Peneliti



*Lampiran 2. Surat Pernyataan Kesiadaan Menjadi Responden***INFORMED CONCENT**

Yang bertanda tangan dibawah ini

Nama : Mulyadi Latief

Umur : 42 Tahun

Jenis Kelamin : Laki-laki

Alamat : Jl. Borong Raya No.1 Inspeksi Kanal

Selaku Pelatih/Pemilik Club PB. Karsa Mandiri kota Makassar menyatakan bahwa atlet kami bersedia menjadi responden dalam penelitian yang dilakukan oleh Noerhanna Dasati dengan judul “ **Pengaruh Pemberian Concentric Strengthening Exercise terhadap Perubahan Foot Alignment, Malleolus Height dan Tingkat Agility pada Pemain Bulu Tangkis Junior di Kota Makassar**”.

Demikian surat pernyataan kesediaan ini saya buat dengan penuh rasa kesadaran dan sukarela.

Makassar, ~~Mei~~ 2019  
Yang membuat pernyataan,




**INFORMED CONCENT**

Yang bertanda tangan dibawah ini

Nama : Irwan Setiawan Muis

Umur : 28 Tahun

Jenis Kelamin : Laki-laki

Alamat : Antang

Selaku Pelatih/Pemilik Club PB. Manggala kota Makassar menyatakan bahwa atlet kami bersedia menjadi responden dalam penelitian yang dilakukan oleh Noerhanna Dasati dengan judul “ Pengaruh Pemberian *Concentric Strengthening Exercise* terhadap Perubahan *Foot Alignment, Malleolus Height* dan Tingkat *Agility* pada Pemain Bulu Tangkis Junior di Kota Makassar”.

Demikian surat pernyataan kesediaan ini saya buat dengan penuh rasa kesadaran dan sukarela.

Makassar, Maret 2019  
Yang membuat pernyataan,





*Lampiran 4. Hasil Pengolahan Data Statistik*

**Hasil Pengolahan Data Statistik**

**A. Karakteristik Sampel**

**Statistics**

Usia Responden

N	Valid	32
	Missing	0

**Usia Responden**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	11.00	6	18.8	18.8	18.8
	12.00	3	9.4	9.4	28.1
	13.00	4	12.5	12.5	40.6
	14.00	8	25.0	25.0	65.6
	15.00	11	34.4	34.4	100.0
Total		32	100.0	100.0	

**B. Uji Normalitas *Pre Test-Post Test Foot Alignment, Malleolus Height dan Agility***

**Tests of Normality**

	Kolmogorov-Smirnov <sup>a</sup>			Shapiro-Wilk		
	Statistic	Df	Sig.	Statistic	df	Sig.
Usia Responden	.143	32	.096	.892	32	.004
Pre test RA Kanan	.115	32	.200 <sup>*</sup>	.965	32	.375
Post test 1 RA Kanan	.115	32	.200 <sup>*</sup>	.965	32	.375
Post test 2 RA Kanan	.125	32	.200 <sup>*</sup>	.964	32	.348
Post test 3 RA Kanan	.186	32	.006	.941	32	.081
Post test 4 RA Kanan	.250	32	.000	.891	32	.004
Post test 5 RA Kanan	.257	32	.000	.841	32	.000
Post test 6 RA Kanan	.289	32	.000	.788	32	.000
Pre test RA Kiri	.229	32	.000	.902	32	.007
Post test 1 RA Kiri	.229	32	.000	.902	32	.007
Post test 2 RA Kiri	.207	32	.001	.931	32	.041
Post test 3 RA Kiri	.241	32	.000	.898	32	.006
Post test 4 RA Kiri	.292	32	.000	.864	32	.001
Post test 5 RA Kiri	.280	32	.000	.847	32	.000





Post test 6 RA Kiri	.388	32	.000	.735	32	.000
Pre test MM Kanan	.127	32	.200*	.978	32	.744
Post test1 MM Kanan	.127	32	.200*	.978	32	.744
Post test 2 MM Kanan	.117	32	.200*	.974	32	.603
Post test 3 MM Kanan	.082	32	.200*	.975	32	.652
Post test 4 MM Kanan	.111	32	.200*	.967	32	.425
Post test 5 MM Kanan	.144	32	.087	.948	32	.129
Post test 6 MM Kanan	.112	32	.200*	.964	32	.358
Pre test ML Kanan	.088	32	.200*	.953	32	.180
Post test 1 ML Kanan	.088	32	.200*	.953	32	.180
Post test 2 ML Kanan	.095	32	.200*	.957	32	.227
Post test 3 ML Kanan	.109	32	.200*	.964	32	.352
Post test 4 ML Kanan	.113	32	.200*	.951	32	.157
Post test 5 ML Kanan	.104	32	.200*	.962	32	.318
Post test 6 ML Kanan	.103	32	.200*	.950	32	.142
Pre test MM Kiri	.106	32	.200*	.957	32	.221
Post test 1 MM Kiri	.106	32	.200*	.957	32	.221
Post test 2 MM Kiri	.084	32	.200*	.963	32	.329
Post test 3 MM Kiri	.111	32	.200*	.951	32	.150
Post test 4 MM Kiri	.134	32	.157	.941	32	.082
Post test 5 MM Kiri	.153	32	.055	.941	32	.080
Post test 6 MM Kiri	.119	32	.200*	.961	32	.295
Pre test ML Kiri	.078	32	.200*	.984	32	.914
Post test 1 ML Kiri	.078	32	.200*	.984	32	.914
Post test 2 ML Kiri	.087	32	.200*	.977	32	.720
Post test 3 ML Kiri	.084	32	.200*	.985	32	.916
Post test 4 ML Kiri	.093	32	.200*	.979	32	.756
Post test 5 ML Kiri	.124	32	.200*	.975	32	.652
Post test 6 ML Kiri	.132	32	.167	.954	32	.189
Pre test Agility	.089	32	.200*	.972	32	.568
Post test 1 Agility	.134	32	.152	.958	32	.244
Post test 2 Agility	.156	32	.047	.954	32	.185
Post test 3 Agility	.080	32	.200*	.976	32	.677
Post test 4 Agility	.131	32	.173	.965	32	.384
Post test 5 Agility	.106	32	.200*	.969	32	.475
Post test 6 Agility	.095	32	.200*	.968	32	.455

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

Significance Correction



### C. Distribusi Perubahan *Foot Alignment* Responden

**Statistics**

	Pre test RA Kanan	Post test 1 RA Kanan	Post test 2 RA Kanan	Post test 3 RA Kanan	Post test 4 RA Kanan	Post test 5 RA Kanan	Post test 6 RA Kanan
N Valid	32	32	32	32	32	32	32
Missing	0	0	0	0	0	0	0

**Pre test RA Kanan**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	-10.00	2	6.3	6.3	6.3
	-9.00	2	6.3	6.3	12.5
	-8.00	6	18.8	18.8	31.3
	-7.00	7	21.9	21.9	53.1
	-6.00	7	21.9	21.9	75.0
	-5.00	5	15.6	15.6	90.6
	-4.00	2	6.3	6.3	96.9
	-2.00	1	3.1	3.1	100.0
Total		32	100.0	100.0	

**Post test 1 RA Kanan**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	-10.00	2	6.3	6.3	6.3
	-9.00	2	6.3	6.3	12.5
	-8.00	6	18.8	18.8	31.3
	-7.00	7	21.9	21.9	53.1
	-6.00	7	21.9	21.9	75.0
	-5.00	5	15.6	15.6	90.6
	-4.00	2	6.3	6.3	96.9
	-2.00	1	3.1	3.1	100.0
Total		32	100.0	100.0	

**Post test 2 RA Kanan**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	-10.00	2	6.3	6.3	6.3
	-9.00	1	3.1	3.1	9.4



-8.00	5	15.6	15.6	25.0
-7.00	8	25.0	25.0	50.0
-6.00	7	21.9	21.9	71.9
-5.00	5	15.6	15.6	87.5
-4.00	3	9.4	9.4	96.9
-2.00	1	3.1	3.1	100.0
Total	32	100.0	100.0	

Post test 3 RA Kanan

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid -9.00	1	3.1	3.1	3.1
-8.00	2	6.3	6.3	9.4
-7.00	4	12.5	12.5	21.9
-6.00	5	15.6	15.6	37.5
-5.00	9	28.1	28.1	65.6
-4.00	9	28.1	28.1	93.8
-3.00	1	3.1	3.1	96.9
-1.00	1	3.1	3.1	100.0
Total	32	100.0	100.0	

Post test 4 RA Kanan

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid -6.00	2	6.3	6.3	6.3
-5.00	4	12.5	12.5	18.8
-4.00	16	50.0	50.0	68.8
-3.00	7	21.9	21.9	90.6
-2.00	3	9.4	9.4	100.0
Total	32	100.0	100.0	

Post test 5 RA Kanan

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid -4.00	2	6.3	6.3	6.3
-3.00	14	43.8	43.8	50.0
-2.00	14	43.8	43.8	93.8



-1.00	2	6.3	6.3	100.0
Total	32	100.0	100.0	

**Post test 6 RA Kanan**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	-3.00	1	3.1	3.1	3.1
	-2.00	15	46.9	46.9	50.0
	-1.00	15	46.9	46.9	96.9
	.00	1	3.1	3.1	100.0
Total		32	100.0	100.0	

**Statistics**

	Pre test RA Kiri	Post test 1 RA Kiri	Post test 2 RA Kiri	Post test 3 RA Kiri	Post test 4 RA Kiri	Post test 5 RA Kiri	Post test 6 RA Kiri
N Valid	32	32	32	32	32	32	32
Missing	0	0	0	0	0	0	0

**Pre test RA Kiri**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	-9.00	1	3.1	3.1	3.1
	-7.00	1	3.1	3.1	6.3
	-6.00	3	9.4	9.4	15.6
	-5.00	13	40.6	40.6	56.3
	-4.00	8	25.0	25.0	81.3
	-3.00	4	12.5	12.5	93.8
	-2.00	2	6.3	6.3	100.0
Total		32	100.0	100.0	

**Post test 1 RA Kiri**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	-9.00	1	3.1	3.1	3.1
	-7.00	1	3.1	3.1	6.3
	-6.00	3	9.4	9.4	15.6
	-5.00	13	40.6	40.6	56.3
	-4.00	8	25.0	25.0	81.3



-3.00	4	12.5	12.5	93.8
-2.00	2	6.3	6.3	100.0
Total	32	100.0	100.0	

Post test 2 RA Kiri

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	-7.00	1	3.1	3.1	3.1
	-6.00	4	12.5	12.5	15.6
	-5.00	12	37.5	37.5	53.1
	-4.00	9	28.1	28.1	81.3
	-3.00	4	12.5	12.5	93.8
	-2.00	2	6.3	6.3	100.0
	Total	32	100.0	100.0	

Post test 3 RA Kiri

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	-6.00	3	9.4	9.4	9.4
	-5.00	5	15.6	15.6	25.0
	-4.00	15	46.9	46.9	71.9
	-3.00	5	15.6	15.6	87.5
	-2.00	4	12.5	12.5	100.0
	Total	32	100.0	100.0	

Post test 4 RA Kiri

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	-5.00	2	6.3	6.3	6.3
	-4.00	7	21.9	21.9	28.1
	-3.00	18	56.3	56.3	84.4
	-2.00	4	12.5	12.5	96.9
	-1.00	1	3.1	3.1	100.0
	Total	32	100.0	100.0	

Post test 5 RA Kiri



		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	-4.00	2	6.3	6.3	6.3
	-3.00	6	18.8	18.8	25.0
	-2.00	16	50.0	50.0	75.0
	-1.00	8	25.0	25.0	100.0
	Total	32	100.0	100.0	

**Post test 6 RA Kiri**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	-3.00	2	6.3	6.3	6.3
	-2.00	8	25.0	25.0	31.3
	-1.00	21	65.6	65.6	96.9
	.00	1	3.1	3.1	100.0
	Total	32	100.0	100.0	

**D. Distribusi Perubahan *Malleolus Height* Responden**

***Malleolus Medial***

**Descriptive Statistics**

	Mean	Std. Deviation	N
Pre test MM Kanan	6.3937	.84546	32
Post test1 MM Kanan	6.3937	.84546	32
Post test 2 MM Kanan	6.4438	.83586	32
Post test 3 MM Kanan	6.5969	.77936	32
Post test 4 MM Kanan	6.7000	.74140	32
Post test 5 MM Kanan	6.8625	.72501	32
Post test 6 MM Kanan	7.0500	.70847	32

**Descriptive Statistics**

	Mean	Std. Deviation	N
Pre test MM Kiri	6.3687	.81851	32
Post test 1 MM Kiri	6.3687	.81851	32
Post test 2 MM Kiri	6.3938	.81476	32
Post test 3 MM Kiri	6.5469	.77334	32
Post test 4 MM Kiri	6.6375	.72368	32
Post test 5 MM Kiri	6.8156	.73049	32
Post test 6 MM Kiri	6.9687	.71321	32





*Malleolus Lateral***Descriptive Statistics**

	Mean	Std. Deviation	N
Pre test ML Kanan	5.1094	.63468	32
Post test 1 ML Kanan	5.1094	.63468	32
Post test 2 ML Kanan	5.1469	.62784	32
Post test 3 ML Kanan	5.2719	.60441	32
Post test 4 ML Kanan	5.4156	.61282	32
Post test 5 ML Kanan	5.5906	.59804	32
Post test 6 ML Kanan	5.7813	.64829	32

**Descriptive Statistics**

	Mean	Std. Deviation	N
Pre test ML Kiri	5.0719	.65265	32
Post test 1 ML Kiri	5.0719	.65265	32
Post test 2 ML Kiri	5.0875	.64596	32
Post test 3 ML Kiri	5.2219	.62668	32
Post test 4 ML Kiri	5.3406	.62829	32
Post test 5 ML Kiri	5.4969	.62397	32
Post test 6 ML Kiri	5.6813	.64229	32

**Descriptives**

		Statistic	Std. Error	
Pre test MM Kanan	Mean	6.3937	.14946	
	95% Confidence Interval for Mean	Lower Bound	6.0889	
		Upper Bound	6.6986	
	5% Trimmed Mean	6.3847		
	Median	6.4500		
	Variance	.715		
	Std. Deviation	.84546		
	Minimum	4.70		
	Maximum	8.10		
	Range	3.40		
	Interquartile Range	1.35		
	Skewness	.139	.414	
	Kurtosis	-.603	.809	
MM Kanan	Mean	6.3937	.14946	
	95% Confidence Interval for Mean	Lower Bound	6.0889	



	Mean	Upper Bound	6.6986	
	5% Trimmed Mean		6.3847	
	Median		6.4500	
	Variance		.715	
	Std. Deviation		.84546	
	Minimum		4.70	
	Maximum		8.10	
	Range		3.40	
	Interquartile Range		1.35	
	Skewness		.139	.414
	Kurtosis		-.603	.809
Post test 2 MM Kanan	Mean		6.4438	.14776
	95% Confidence Interval for Mean	Lower Bound	6.1424	
		Upper Bound	6.7451	
	5% Trimmed Mean		6.4333	
	Median		6.5000	
	Variance		.699	
	Std. Deviation		.83586	
	Minimum		4.90	
	Maximum		8.10	
	Range		3.20	
	Interquartile Range		1.28	
	Skewness		.227	.414
	Kurtosis		-.605	.809
Post test 3 MM Kanan	Mean		6.5969	.13777
	95% Confidence Interval for Mean	Lower Bound	6.3159	
		Upper Bound	6.8779	
	5% Trimmed Mean		6.5868	
	Median		6.6000	
	Variance		.607	
	Std. Deviation		.77936	
	Minimum		5.10	
	Maximum		8.20	
	Range		3.10	
	Interquartile Range		1.15	
	Skewness		.281	.414
	Kurtosis		-.347	.809
MM Kanan	Mean		6.7000	.13106
	95% Confidence Interval for Mean	Lower Bound	6.4327	



	Mean	Upper Bound	6.9673	
	5% Trimmed Mean		6.6882	
	Median		6.7000	
	Variance		.550	
	Std. Deviation		.74140	
	Minimum		5.30	
	Maximum		8.20	
	Range		2.90	
	Interquartile Range		1.05	
	Skewness		.335	.414
	Kurtosis		-.382	.809
Post test 5 MM Kanan	Mean		6.8625	.12817
	95% Confidence Interval for	Lower Bound	6.6011	
	Mean	Upper Bound	7.1239	
	5% Trimmed Mean		6.8313	
	Median		6.8500	
	Variance		.526	
	Std. Deviation		.72501	
	Minimum		5.80	
	Maximum		8.60	
	Range		2.80	
	Interquartile Range		1.05	
	Skewness		.501	.414
	Kurtosis		-.247	.809
Post test 6 MM Kanan	Mean		7.0500	.12524
	95% Confidence Interval for	Lower Bound	6.7946	
	Mean	Upper Bound	7.3054	
	5% Trimmed Mean		7.0278	
	Median		7.0500	
	Variance		.502	
	Std. Deviation		.70847	
	Minimum		5.90	
	Maximum		8.60	
	Range		2.70	
	Interquartile Range		1.00	
	Skewness		.416	.414
	Kurtosis		-.282	.809
L Kanan	Mean		5.1094	.11220
	95% Confidence Interval for	Lower Bound	4.8806	



	Mean	Upper Bound	5.3382	
	5% Trimmed Mean		5.0813	
	Median		5.1000	
	Variance		.403	
	Std. Deviation		.63468	
	Minimum		4.20	
	Maximum		6.60	
	Range		2.40	
	Interquartile Range		1.07	
	Skewness		.344	.414
	Kurtosis		-.319	.809
Post test 1 ML Kanan	Mean		5.1094	.11220
	95% Confidence Interval for Mean	Lower Bound	4.8806	
		Upper Bound	5.3382	
	5% Trimmed Mean		5.0813	
	Median		5.1000	
	Variance		.403	
	Std. Deviation		.63468	
	Minimum		4.20	
	Maximum		6.60	
	Range		2.40	
	Interquartile Range		1.07	
	Skewness		.344	.414
	Kurtosis		-.319	.809
Post test 2 ML Kanan	Mean		5.1469	.11099
	95% Confidence Interval for Mean	Lower Bound	4.9205	
		Upper Bound	5.3732	
	5% Trimmed Mean		5.1208	
	Median		5.1500	
	Variance		.394	
	Std. Deviation		.62784	
	Minimum		4.20	
	Maximum		6.60	
	Range		2.40	
	Interquartile Range		.90	
	Skewness		.340	.414
	Kurtosis		-.179	.809
3 ML Kanan	Mean		5.2719	.10685
	95% Confidence Interval for Mean	Lower Bound	5.0540	



	Mean	Upper Bound	5.4898	
	5% Trimmed Mean		5.2472	
	Median		5.3000	
	Variance		.365	
	Std. Deviation		.60441	
	Minimum		4.30	
	Maximum		6.80	
	Range		2.50	
	Interquartile Range		.88	
	Skewness		.374	.414
	Kurtosis		.161	.809
Post test 4 ML Kanan	Mean		5.4156	.10833
	95% Confidence Interval for	Lower Bound	5.1947	
	Mean	Upper Bound	5.6366	
	5% Trimmed Mean		5.3951	
	Median		5.4000	
	Variance		.376	
	Std. Deviation		.61282	
	Minimum		4.40	
	Maximum		6.80	
	Range		2.40	
	Interquartile Range		.87	
	Skewness		.256	.414
	Kurtosis		.005	.809
Post test 5 ML Kanan	Mean		5.5906	.10572
	95% Confidence Interval for	Lower Bound	5.3750	
	Mean	Upper Bound	5.8062	
	5% Trimmed Mean		5.5806	
	Median		5.6500	
	Variance		.358	
	Std. Deviation		.59804	
	Minimum		4.60	
	Maximum		6.80	
	Range		2.20	
	Interquartile Range		.90	
	Skewness		-.029	.414
	Kurtosis		-.635	.809
6 ML Kanan	Mean		5.7813	.11460
	95% Confidence Interval for	Lower Bound	5.5475	



	Mean	Upper Bound	6.0150	
	5% Trimmed Mean		5.7632	
	Median		5.8000	
	Variance		.420	
	Std. Deviation		.64829	
	Minimum		4.80	
	Maximum		7.20	
	Range		2.40	
	Interquartile Range		.90	
	Skewness		.268	.414
	Kurtosis		-.471	.809
Pre test MM Kiri	Mean		6.3688	.14469
	95% Confidence Interval for	Lower Bound	6.0736	
	Mean	Upper Bound	6.6639	
	5% Trimmed Mean		6.3417	
	Median		6.2500	
	Variance		.670	
	Std. Deviation		.81851	
	Minimum		5.10	
	Maximum		8.20	
	Range		3.10	
	Interquartile Range		1.17	
	Skewness		.505	.414
	Kurtosis		-.480	.809
Post test 1 MM Kiri	Mean		6.3688	.14469
	95% Confidence Interval for	Lower Bound	6.0736	
	Mean	Upper Bound	6.6639	
	5% Trimmed Mean		6.3417	
	Median		6.2500	
	Variance		.670	
	Std. Deviation		.81851	
	Minimum		5.10	
	Maximum		8.20	
	Range		3.10	
	Interquartile Range		1.17	
	Skewness		.505	.414
	Kurtosis		-.480	.809
2 MM Kiri	Mean		6.3937	.14403
	95% Confidence Interval for	Lower Bound	6.1000	





	Mean	Upper Bound	6.6875	
	5% Trimmed Mean		6.3694	
	Median		6.3500	
	Variance		.664	
	Std. Deviation		.81476	
	Minimum		5.10	
	Maximum		8.20	
	Range		3.10	
	Interquartile Range		1.17	
	Skewness		.469	.414
	Kurtosis		-.424	.809
Post test 3 MM Kiri	Mean		6.5469	.13671
	95% Confidence Interval for	Lower Bound	6.2681	
	Mean	Upper Bound	6.8257	
	5% Trimmed Mean		6.5181	
	Median		6.4500	
	Variance		.598	
	Std. Deviation		.77334	
	Minimum		5.20	
	Maximum		8.30	
	Range		3.10	
	Interquartile Range		1.07	
	Skewness		.654	.414
	Kurtosis		-.047	.809
Post test 4 MM Kiri	Mean		6.6375	.12793
	95% Confidence Interval for	Lower Bound	6.3766	
	Mean	Upper Bound	6.8984	
	5% Trimmed Mean		6.6062	
	Median		6.5000	
	Variance		.524	
	Std. Deviation		.72368	
	Minimum		5.50	
	Maximum		8.30	
	Range		2.80	
	Interquartile Range		1.00	
	Skewness		.732	.414
	Kurtosis		-.051	.809
5 MM Kiri	Mean		6.8156	.12913
	95% Confidence Interval for	Lower Bound	6.5523	



	Mean	Upper Bound	7.0790	
	5% Trimmed Mean		6.7840	
	Median		6.7500	
	Variance		.534	
	Std. Deviation		.73049	
	Minimum		5.70	
	Maximum		8.50	
	Range		2.80	
	Interquartile Range		1.05	
	Skewness		.632	.414
	Kurtosis		-.135	.809
Post test 6 MM Kiri	Mean		6.9688	.12608
	95% Confidence Interval for	Lower Bound	6.7116	
	Mean	Upper Bound	7.2259	
	5% Trimmed Mean		6.9431	
	Median		6.9500	
	Variance		.509	
	Std. Deviation		.71321	
	Minimum		5.80	
	Maximum		8.60	
	Range		2.80	
	Interquartile Range		.97	
	Skewness		.478	.414
	Kurtosis		-.202	.809
Pre test ML Kiri	Mean		5.0719	.11537
	95% Confidence Interval for	Lower Bound	4.8366	
	Mean	Upper Bound	5.3072	
	5% Trimmed Mean		5.0625	
	Median		5.1000	
	Variance		.426	
	Std. Deviation		.65265	
	Minimum		3.70	
	Maximum		6.50	
	Range		2.80	
	Interquartile Range		.95	
	Skewness		.153	.414
	Kurtosis		-.133	.809
ML Kiri	Mean		5.0719	.11537
	95% Confidence Interval for	Lower Bound	4.8366	



	Mean	Upper Bound	5.3072	
	5% Trimmed Mean		5.0625	
	Median		5.1000	
	Variance		.426	
	Std. Deviation		.65265	
	Minimum		3.70	
	Maximum		6.50	
	Range		2.80	
	Interquartile Range		.95	
	Skewness		.153	.414
	Kurtosis		-.133	.809
Post test 2 ML Kiri	Mean		5.0875	.11419
	95% Confidence Interval for	Lower Bound	4.8546	
	Mean	Upper Bound	5.3204	
	5% Trimmed Mean		5.0757	
	Median		5.1000	
	Variance		.417	
	Std. Deviation		.64596	
	Minimum		3.70	
	Maximum		6.50	
	Range		2.80	
	Interquartile Range		1.05	
	Skewness		.175	.414
	Kurtosis		-.159	.809
Post test 3 ML Kiri	Mean		5.2219	.11078
	95% Confidence Interval for	Lower Bound	4.9959	
	Mean	Upper Bound	5.4478	
	5% Trimmed Mean		5.2160	
	Median		5.2000	
	Variance		.393	
	Std. Deviation		.62668	
	Minimum		3.80	
	Maximum		6.60	
	Range		2.80	
	Interquartile Range		.88	
	Skewness		.055	.414
	Kurtosis		-.074	.809
ML Kiri	Mean		5.3406	.11107
	95% Confidence Interval for	Lower Bound	5.1141	



	Mean	Upper Bound	5.5671	
	5% Trimmed Mean		5.3326	
	Median		5.4000	
	Variance		.395	
	Std. Deviation		.62829	
	Minimum		3.90	
	Maximum		6.70	
	Range		2.80	
	Interquartile Range		.90	
	Skewness		.084	.414
	Kurtosis		.193	.809
Post test 5 ML Kiri	Mean		5.4969	.11030
	95% Confidence Interval for Mean	Lower Bound	5.2719	
		Upper Bound	5.7218	
	5% Trimmed Mean		5.4889	
	Median		5.6000	
	Variance		.389	
	Std. Deviation		.62397	
	Minimum		4.30	
	Maximum		6.80	
	Range		2.50	
	Interquartile Range		.88	
	Skewness		.004	.414
	Kurtosis		-.450	.809
Post test 6 ML Kiri	Mean		5.6813	.11354
	95% Confidence Interval for Mean	Lower Bound	5.4497	
		Upper Bound	5.9128	
	5% Trimmed Mean		5.6681	
	Median		5.7000	
	Variance		.413	
	Std. Deviation		.64229	
	Minimum		4.60	
	Maximum		7.00	
	Range		2.40	
	Interquartile Range		.88	
	Skewness		.234	.414
	Kurtosis		-.418	.809



### E. Distribusi Perubahan *Agility* Responden

Descriptive Statistics

	Mean	Std. Deviation	N
Pre test Agility	18.8453	2.22927	32
Post test 1 Agility	17.7369	1.83857	32
Post test 2 Agility	17.1678	1.81143	32
Post test 3 Agility	16.5975	1.48557	32
Post test 4 Agility	16.1350	1.46902	32
Post test 5 Agility	15.5738	1.43133	32
Post test 6 Agility	15.1781	1.36476	32

### F. Perbandingan Perubahan *Foot Alignment*

Friedman Test

Ranks

	Mean Rank
Pre test RA Kanan	2.05
Post test 1 RA Kanan	2.05
Post test 2 RA Kanan	2.28
Post test 3 RA Kanan	3.98
Post test 4 RA Kanan	4.77
Post test 5 RA Kanan	5.97
Post test 6 RA Kanan	6.91

Test Statistics<sup>a</sup>

N	32
Chi-Square	179.522
Df	6
Asymp. Sig.	.000

a. Friedman Test

### Wilcoxon Signed Ranks Test

Test Statistics<sup>a</sup>

	Post test 1 RA Kanan - Pre test RA Kanan	Post test 2 RA Kanan - Post test 1 RA Kanan	Post test 3 RA Kanan - Post test 2 RA Kanan	Post test 4 RA Kanan - Post test 3 RA Kanan	Post test 5 RA Kanan - Post test 4 RA Kanan	Post test 6 RA Kanan - Post test 5 RA Kanan
Z	.000 <sup>b</sup>	-2.121 <sup>c</sup>	-4.818 <sup>c</sup>	-4.358 <sup>c</sup>	-4.939 <sup>c</sup>	-4.866 <sup>c</sup>
Asymp. Sig.	1.000	.034	.000	.000	.000	.000

Wilcoxon Signed Ranks Test

The sum of negative ranks equals the sum of positive ranks.

The sum of negative ranks.



### Friedman Test

Ranks	
	Mean Rank
Pre test RA Kiri	2.28
Post test 1 RA Kiri	2.28
Post test 2 RA Kiri	2.39
Post test 3 RA Kiri	3.48
Post test 4 RA Kiri	4.63
Post test 5 RA Kiri	6.16
Post test 6 RA Kiri	6.78

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

N	32
Chi-Square	176.100
Df	6
Asymp. Sig.	.000

a. Friedman Test

### Wilcoxon Signed Ranks Test

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

	Post test 1 RA Kiri - Pre test RA Kiri	Post test 2 RA Kiri - Post test 1 RA Kiri	Post test 3 RA Kiri - Post test 2 RA Kiri	Post test 4 RA Kiri - Post test 3 RA Kiri	Post test 5 RA Kiri - Post test 4 RA Kiri	Post test 6 RA Kiri - Post test 5 RA Kiri
Z	.000 <sup>b</sup>	-1.342 <sup>c</sup>	-3.900 <sup>c</sup>	-4.017 <sup>c</sup>	-5.057 <sup>c</sup>	-4.065 <sup>c</sup>
Asymp. Sig. (2- tailed)	1.000	.180	.000	.000	.000	.000

a. Wilcoxon Signed Ranks Test

b. The sum of negative ranks equals the sum of positive ranks.

c. Based on negative ranks.



## G. Perbandingan Perubahan *Malleolus Height*

### *Malleolus Medial*

#### Tests of Within-Subjects Effects

Measure: MMKanan

Source	Type III Sum of Squares	Df	Mean Square	F	Sig.	Partial Eta Squared	Noncent. Parameter	Observed Power <sup>a</sup>	
Factor	Sphericity Assumed	12.244	6	2.041	91.027	.000	.746	546.164	1.000
	Greenhouse-Geisser	12.244	2.074	5.903	91.027	.000	.746	188.814	1.000
	Huynh-Feldt	12.244	2.226	5.502	91.027	.000	.746	202.588	1.000
	Lower-bound	12.244	1.000	12.244	91.027	.000	.746	91.027	1.000
	Error(factor)	Sphericity Assumed	4.170	186	.022				
	Greenhouse-Geisser	4.170	64.302	.065					
	Huynh-Feldt	4.170	68.993	.060					
	Lower-bound	4.170	31.000	.135					

a. Computed using alpha = .05

#### Pairwise Comparisons

Measure: MMKanan

(I) factor	(J) factor	Mean Difference (I-J)	Std. Error	Sig. <sup>b</sup>	95% Confidence Interval for Difference <sup>b</sup>	
					Lower Bound	Upper Bound
1	2	.000	.000	.	.000	.000
	3	-.050	.028	1.000	-.143	.043
	4	-.203*	.037	.000	-.324	-.082
	5	-.306*	.039	.000	-.437	-.176
	6	-.469*	.051	.000	-.637	-.300
	7	-.656*	.053	.000	-.831	-.482
1		.000	.000	.	.000	.000



	3		-.050	.028	1.000	-.143	.043
	4		-.203*	.037	.000	-.324	-.082
	5		-.306*	.039	.000	-.437	-.176
	6		-.469*	.051	.000	-.637	-.300
	7		-.656*	.053	.000	-.831	-.482
3	1		.050	.028	1.000	-.043	.143
	2		.050	.028	1.000	-.043	.143
	4		-.153*	.023	.000	-.229	-.077
	5		-.256*	.031	.000	-.358	-.154
	6		-.419*	.043	.000	-.560	-.277
	7		-.606*	.049	.000	-.768	-.445
4	1		.203*	.037	.000	.082	.324
	2		.203*	.037	.000	.082	.324
	3		.153*	.023	.000	.077	.229
	5		-.103*	.019	.000	-.167	-.039
	6		-.266*	.033	.000	-.376	-.155
	7		-.453*	.041	.000	-.588	-.319
5	1		.306*	.039	.000	.176	.437
	2		.306*	.039	.000	.176	.437
	3		.256*	.031	.000	.154	.358
	4		.103*	.019	.000	.039	.167
	6		-.162*	.029	.000	-.257	-.068
	7		-.350*	.035	.000	-.465	-.235
6	1		.469*	.051	.000	.300	.637
	2		.469*	.051	.000	.300	.637
	3		.419*	.043	.000	.277	.560
	4		.266*	.033	.000	.155	.376
	5		.162*	.029	.000	.068	.257
	7		-.188*	.022	.000	-.260	-.115
7	1		.656*	.053	.000	.482	.831
	2		.656*	.053	.000	.482	.831
	3		.606*	.049	.000	.445	.768
	4		.453*	.041	.000	.319	.588
	5		.350*	.035	.000	.235	.465
	6		.188*	.022	.000	.115	.260

estimated marginal means

an difference is significant at the .05 level.

test for multiple comparisons: Bonferroni.





## Tests of Within-Subjects Effects

Measure: MMKiri

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared	Noncent. Parameter	Observed Power <sup>a</sup>	
Factor	Sphericity Assumed	10.712	6	1.785	85.234	.000	.733	511.403	1.000
	Greenhouse-Geisser	10.712	2.347	4.563	85.234	.000	.733	200.085	1.000
	Huynh-Feldt	10.712	2.552	4.198	85.234	.000	.733	217.512	1.000
	Lower-bound	10.712	1.000	10.712	85.234	.000	.733	85.234	1.000
	Error(factor)	Sphericity Assumed	3.896	186	.021				
	Greenhouse-Geisser	3.896	72.772	.054					
	Huynh-Feldt	3.896	79.110	.049					
	Lower-bound	3.896	31.000	.126					

a. Computed using alpha = .05

## Pairwise Comparisons

Measure: MMKiri

(I) factor	(J) factor	Mean Difference (I-J)	Std. Error	Sig. <sup>b</sup>	95% Confidence Interval for Difference <sup>b</sup>	
					Lower Bound	Upper Bound
1	2	.000	.000	.	.000	.000
	3	-.025	.022	1.000	-.098	.048
	4	-.178 <sup>*</sup>	.034	.000	-.289	-.067
	5	-.269 <sup>*</sup>	.043	.000	-.412	-.125
	6	-.447 <sup>*</sup>	.044	.000	-.592	-.302
	7	-.600 <sup>*</sup>	.045	.000	-.750	-.450
2	1	.000	.000	.	.000	.000
	3	-.025	.022	1.000	-.098	.048
	4	-.178 <sup>*</sup>	.034	.000	-.289	-.067
	5	-.269 <sup>*</sup>	.043	.000	-.412	-.125
	6	-.447 <sup>*</sup>	.044	.000	-.592	-.302
	7	-.600 <sup>*</sup>	.045	.000	-.750	-.450
3	1	.025	.022	1.000	-.048	.098
	2	.025	.022	1.000	-.048	.098
	4	-.153 <sup>*</sup>	.028	.000	-.246	-.060
	5	-.244 <sup>*</sup>	.041	.000	-.380	-.108



	6	-0.422*	.044	.000	-.569	-.275
	7	-.575*	.049	.000	-.736	-.414
4	1	.178*	.034	.000	.067	.289
	2	.178*	.034	.000	.067	.289
	3	.153*	.028	.000	.060	.246
	5	-.091*	.026	.031	-.176	-.005
	6	-.269*	.031	.000	-.371	-.166
	7	-.422*	.040	.000	-.554	-.290
	5	1	.269*	.043	.000	.125
2		.269*	.043	.000	.125	.412
3		.244*	.041	.000	.108	.380
4		.091*	.026	.031	.005	.176
6		-.178*	.026	.000	-.266	-.091
7		-.331*	.034	.000	-.445	-.218
6		1	.447*	.044	.000	.302
	2	.447*	.044	.000	.302	.592
	3	.422*	.044	.000	.275	.569
	4	.269*	.031	.000	.166	.371
	5	.178*	.026	.000	.091	.266
	7	-.153*	.026	.000	-.238	-.068
	7	1	.600*	.045	.000	.450
2		.600*	.045	.000	.450	.750
3		.575*	.049	.000	.414	.736
4		.422*	.040	.000	.290	.554
5		.331*	.034	.000	.218	.445
6		.153*	.026	.000	.068	.238

Based on estimated marginal means

\*. The mean difference is significant at the .05 level.

b. Adjustment for multiple comparisons: Bonferroni.



*Malleolus Lateral*

## Tests of Within-Subjects Effects

Measure: MLKanan

Source		Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared	Noncent. Parameter	Observed Power <sup>a</sup>
Factor	Sphericity Assumed	13.160	6	2.193	98.076	.000	.760	588.454	1.000
	Greenhouse-Geisser	13.160	1.512	8.707	98.076	.000	.760	148.242	1.000
	Huynh-Feldt	13.160	1.572	8.369	98.076	.000	.760	154.216	1.000
	Lower-bound	13.160	1.000	13.160	98.076	.000	.760	98.076	1.000
Error(factor)	Sphericity Assumed	4.160	186	.022					
	Greenhouse-Geisser	4.160	46.857	.089					
	Huynh-Feldt	4.160	48.745	.085					
	Lower-bound	4.160	31.000	.134					

a. Computed using alpha = .05

## Pairwise Comparisons

Measure: MLKanan

(I) factor	(J) factor	Mean Difference (I-J)	Std. Error	Sig. <sup>b</sup>	95% Confidence Interval for Difference <sup>b</sup>	
					Lower Bound	Upper Bound
1	2	.000	.000	.	.000	.000
	3	-.038	.013	.173	-.081	.006
	4	-.163 <sup>*</sup>	.019	.000	-.227	-.098
	5	-.306 <sup>*</sup>	.028	.000	-.400	-.212
	6	-.481 <sup>*</sup>	.043	.000	-.623	-.339
	7	-.672 <sup>*</sup>	.061	.000	-.874	-.470
2	1	.000	.000	.	.000	.000
	3	-.038	.013	.173	-.081	.006
	4	-.163 <sup>*</sup>	.019	.000	-.227	-.098
	5	-.306 <sup>*</sup>	.028	.000	-.400	-.212
	6	-.481 <sup>*</sup>	.043	.000	-.623	-.339
	7	-.672 <sup>*</sup>	.061	.000	-.874	-.470
3	1	.038	.013	.173	-.006	.081
	2	.038	.013	.173	-.006	.081
	4	-.125 <sup>*</sup>	.017	.000	-.181	-.069
	5	-.269 <sup>*</sup>	.026	.000	-.356	-.182
	6	-.444 <sup>*</sup>	.041	.000	-.579	-.308
	7	-.634 <sup>*</sup>	.060	.000	-.833	-.435



4	1	.163 <sup>+</sup>	.019	.000	.098	.227
	2	.163 <sup>+</sup>	.019	.000	.098	.227
	3	.125 <sup>+</sup>	.017	.000	.069	.181
	5	-.144 <sup>+</sup>	.020	.000	-.208	-.079
	6	-.319 <sup>+</sup>	.038	.000	-.446	-.191
	7	-.509 <sup>+</sup>	.058	.000	-.703	-.316
	5	1	.306 <sup>+</sup>	.028	.000	.212
2		.306 <sup>+</sup>	.028	.000	.212	.400
3		.269 <sup>+</sup>	.026	.000	.182	.356
4		.144 <sup>+</sup>	.020	.000	.079	.208
6		-.175 <sup>+</sup>	.028	.000	-.267	-.083
7		-.366 <sup>+</sup>	.048	.000	-.524	-.207
6		1	.481 <sup>+</sup>	.043	.000	.339
	2	.481 <sup>+</sup>	.043	.000	.339	.623
	3	.444 <sup>+</sup>	.041	.000	.308	.579
	4	.319 <sup>+</sup>	.038	.000	.191	.446
	5	.175 <sup>+</sup>	.028	.000	.083	.267
	7	-.191 <sup>+</sup>	.030	.000	-.288	-.093
	7	1	.672 <sup>+</sup>	.061	.000	.470
2		.672 <sup>+</sup>	.061	.000	.470	.874
3		.634 <sup>+</sup>	.060	.000	.435	.833
4		.509 <sup>+</sup>	.058	.000	.316	.703
5		.366 <sup>+</sup>	.048	.000	.207	.524
6		.191 <sup>+</sup>	.030	.000	.093	.288

Based on estimated marginal means

\*. The mean difference is significant at the .05 level.

b. Adjustment for multiple comparisons: Bonferroni.



### Tests of Within-Subjects Effects

Measure: MLKiri

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared	Noncent. Parameter	Observed Power <sup>a</sup>	
factor	Sphericity Assumed	10.840	6	1.807	103.910	.000	.770	623.463	1.000
	Greenhouse-Geisser	10.840	1.929	5.619	103.910	.000	.770	200.467	1.000
	Huynh-Feldt	10.840	2.055	5.276	103.910	.000	.770	213.518	1.000
	Lower-bound	10.840	1.000	10.840	103.910	.000	.770	103.910	1.000
Error(factor)	Sphericity Assumed	3.234	186	.017					
	Greenhouse-Geisser	3.234	59.806	.054					
	Huynh-Feldt	3.234	63.700	.051					
	Lower-bound	3.234	31.000	.104					

a. Computed using alpha = .05

### Pairwise Comparisons

Measure: MLKiri

(I) factor	(J) factor	Mean Difference (I-J)	Std. Error	Sig. <sup>b</sup>	95% Confidence Interval for Difference <sup>b</sup>	
					Lower Bound	Upper Bound
1	2	.000	.000	.	.000	.000
	3	-.016	.014	1.000	-.063	.032
	4	-.150 <sup>*</sup>	.030	.000	-.249	-.051
	5	-.269 <sup>*</sup>	.036	.000	-.387	-.150
	6	-.425 <sup>*</sup>	.043	.000	-.568	-.282
	7	-.609 <sup>*</sup>	.048	.000	-.770	-.449
2	1	.000	.000	.	.000	.000
	3	-.016	.014	1.000	-.063	.032
	4	-.150 <sup>*</sup>	.030	.000	-.249	-.051
	5	-.269 <sup>*</sup>	.036	.000	-.387	-.150
	6	-.425 <sup>*</sup>	.043	.000	-.568	-.282
	7	-.609 <sup>*</sup>	.048	.000	-.770	-.449
3	1	.016	.014	1.000	-.032	.063
	2	.016	.014	1.000	-.032	.063
	4	-.134 <sup>*</sup>	.023	.000	-.210	-.059
	5	-.253 <sup>*</sup>	.030	.000	-.353	-.153
	6	-.409 <sup>*</sup>	.038	.000	-.537	-.282
	7	-.594 <sup>*</sup>	.044	.000	-.740	-.447
1	2	.150 <sup>*</sup>	.030	.000	.051	.249
	2	.150 <sup>*</sup>	.030	.000	.051	.249



	3	.134*	.023	.000	.059	.210
	5	-.119*	.016	.000	-.173	-.064
	6	-.275*	.028	.000	-.367	-.183
	7	-.459*	.038	.000	-.585	-.333
5	1	.269*	.036	.000	.150	.387
	2	.269*	.036	.000	.150	.387
	3	.253*	.030	.000	.153	.353
	4	.119*	.016	.000	.064	.173
	6	-.156*	.021	.000	-.224	-.088
	7	-.341*	.034	.000	-.455	-.227
6	1	.425*	.043	.000	.282	.568
	2	.425*	.043	.000	.282	.568
	3	.409*	.038	.000	.282	.537
	4	.275*	.028	.000	.183	.367
	5	.156*	.021	.000	.088	.224
	7	-.184*	.026	.000	-.271	-.098
7	1	.609*	.048	.000	.449	.770
	2	.609*	.048	.000	.449	.770
	3	.594*	.044	.000	.447	.740
	4	.459*	.038	.000	.333	.585
	5	.341*	.034	.000	.227	.455
	6	.184*	.026	.000	.098	.271

Based on estimated marginal means

\*. The mean difference is significant at the .05 level.

b. Adjustment for multiple comparisons: Bonferroni.

## H. Perbandingan Perubahan *Agility*

**Descriptive Statistics**

	Mean	Std. Deviation	N
Pre test Agility	18.8453	2.22927	32
Post test 1 Agility	17.7369	1.83857	32
Post test 2 Agility	17.1678	1.81143	32
Post test 3 Agility	16.5975	1.48557	32
Post test 4 Agility	16.1350	1.46902	32
Post test 5 Agility	15.5738	1.43133	32
Post test 6 Agility	15.1781	1.36476	32

## Pairwise Comparisons



Measure: Agility

(I) factor1	(J) factor1	Mean Difference (I-J)	Std. Error	Sig. <sup>b</sup>	95% Confidence Interval for Difference <sup>b</sup>	
					Lower Bound	Upper Bound
1	2	1.108 <sup>+</sup>	.202	.000	.697	1.520
	3	1.678 <sup>+</sup>	.212	.000	1.245	2.110
	4	2.248 <sup>+</sup>	.212	.000	1.816	2.680
	5	2.710 <sup>+</sup>	.227	.000	2.247	3.173
	6	3.272 <sup>+</sup>	.223	.000	2.816	3.727
	7	3.667 <sup>+</sup>	.227	.000	3.203	4.131
2	1	-1.108 <sup>+</sup>	.202	.000	-1.520	-.697
	3	.569 <sup>+</sup>	.101	.000	.364	.774
	4	1.139 <sup>+</sup>	.132	.000	.871	1.408
	5	1.602 <sup>+</sup>	.166	.000	1.264	1.940
	6	2.163 <sup>+</sup>	.173	.000	1.810	2.516
	7	2.559 <sup>+</sup>	.199	.000	2.152	2.965
3	1	-1.678 <sup>+</sup>	.212	.000	-2.110	-1.245
	2	-.569 <sup>+</sup>	.101	.000	-.774	-.364
	4	.570 <sup>+</sup>	.109	.000	.349	.792
	5	1.033 <sup>+</sup>	.142	.000	.743	1.322
	6	1.594 <sup>+</sup>	.167	.000	1.252	1.936
	7	1.990 <sup>+</sup>	.193	.000	1.597	2.382
4	1	-2.248 <sup>+</sup>	.212	.000	-2.680	-1.816
	2	-1.139 <sup>+</sup>	.132	.000	-1.408	-.871
	3	-.570 <sup>+</sup>	.109	.000	-.792	-.349
	5	.463 <sup>+</sup>	.082	.000	.295	.630
	6	1.024 <sup>+</sup>	.090	.000	.841	1.207
	7	1.419 <sup>+</sup>	.134	.000	1.146	1.693
5	1	-2.710 <sup>+</sup>	.227	.000	-3.173	-2.247
	2	-1.602 <sup>+</sup>	.166	.000	-1.940	-1.264
	3	-1.033 <sup>+</sup>	.142	.000	-1.322	-.743
	4	-.463 <sup>+</sup>	.082	.000	-.630	-.295
	6	.561 <sup>+</sup>	.098	.000	.361	.761
	7	.957 <sup>+</sup>	.132	.000	.687	1.226
6	1	-3.272 <sup>+</sup>	.223	.000	-3.727	-2.816
	2	-2.163 <sup>+</sup>	.173	.000	-2.516	-1.810
	3	-1.594 <sup>+</sup>	.167	.000	-1.936	-1.252
	4	-1.024 <sup>+</sup>	.090	.000	-1.207	-.841
	5	-.561 <sup>+</sup>	.098	.000	-.761	-.361



	7	.396 <sup>*</sup>	.106	.001	.180	.611
7	1	-3.667 <sup>*</sup>	.227	.000	-4.131	-3.203
	2	-2.559 <sup>*</sup>	.199	.000	-2.965	-2.152
	3	-1.990 <sup>*</sup>	.193	.000	-2.382	-1.597
	4	-1.419 <sup>*</sup>	.134	.000	-1.693	-1.146
	5	-.957 <sup>*</sup>	.132	.000	-1.226	-.687
	6	-.396 <sup>*</sup>	.106	.001	-.611	-.180

Based on estimated marginal means

\*. The mean difference is significant at the .05 level.

b. Adjustment for multiple comparisons: Least Significant Difference (equivalent to no adjustments).

### I. Hubungan antara *foot alignment* dan *malleolus height* dengan tingkat *agility*

		Post test 6 RA Kanan	Post test 6 MM Kanan	Post test 6 ML Kanan	Post test 6 Agility
Post test 6 RA Kanan	Pearson Correlation	1	.110	.104	-.234
	Sig. (2-tailed)		.550	.571	.197
	N	32	32	32	32
Post test 6 MM Kanan	Pearson Correlation	.110	1	.964 <sup>**</sup>	-.447 <sup>*</sup>
	Sig. (2-tailed)	.550		.000	.010
	N	32	32	32	32
Post test 6 ML Kanan	Pearson Correlation	.104	.964 <sup>**</sup>	1	-.448 <sup>*</sup>
	Sig. (2-tailed)	.571	.000		.010
	N	32	32	32	32
Post test 6 Agility	Pearson Correlation	-.234	-.447 <sup>*</sup>	-.448 <sup>*</sup>	1
	Sig. (2-tailed)	.197	.010	.010	
	N	32	32	32	32

\*\* Correlation is significant at the 0.01 level (2-tailed).

\* Correlation is significant at the 0.05 level (2-tailed).





## Correlations

		Post test 6 RA Kiri	Post test 6 MM Kiri	Post test 6 ML Kiri	Post test 6 Agility
Post test 6 RA Kiri	Pearson Correlation	1	-.197	-.208	-.231
	Sig. (2-tailed)		.280	.253	.204
	N	32	32	32	32
Post test 6 MM Kiri	Pearson Correlation	-.197	1	.969**	-.448*
	Sig. (2-tailed)	.280		.000	.010
	N	32	32	32	32
Post test 6 ML Kiri	Pearson Correlation	-.208	.969**	1	-.455**
	Sig. (2-tailed)	.253	.000		.009
	N	32	32	32	32
Post test 6 Agility	Pearson Correlation	-.231	-.448*	-.455**	1
	Sig. (2-tailed)	.204	.010	.009	
	N	32	32	32	32


\*\* . Correlation is significant at the 0.01 level (2-tailed).


\* . Correlation is significant at the 0.05 level (2-tailed).



*Lampiran 5. Surat Permohonan Izin Melakukan Penelitian*

**a. PB Karsa Mandiri Makassar**





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---

Makassar, 13 Februari 2019


No : 909/UN4.18.8/PL.00.00/2019  
 Lamp : -  
 Hal : *Permohonan izin Melakukan Penelitian*

Kepada  
 Yth : PB Karsa Mandiri  
 di - Makassar

Dengan hormat, Dalam rangka penyelesaian tugas akhir (skripsi) mahasiswa program studi Fisioterapi Fakultas Keperawatan Universitas Hasamuddin, maka dengan ini dimohon bantuan Bapak/Ibu dapat mengizinkan Mahasiswa kami dalam melakukan Penelitian seperti tersebut dibawah ini:

Nama : Noerhanna Dasati  
 NIM : C13115505  
 Judul Penelitian : "Pengaruh *Concentric Strengthening Exercise* terhadap *Foot Alignment*, *Malleolus Height* dan *Tingkat Agility* pada Pemain Bulu Tangkis Junior di Kota Makassar"  
 Lokasi Penelitian : PB Karsa Mandiri

Demikian penyampaian kami, atas perhatian dan kerja sama yang baik diucapkan terima kasih.



Wakil Dekan Bidang Akademik  
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*AA*

Dr. H. Dighan Aras, S.Ft, Physio, M.Kes  
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## b. PB Yanti Jaya Makassar



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Makassar, 13 Februari 2019

No : 909/UN4.18.8/PL.00.00/2019  
 Lamp : -  
 Hal : *Permohonan izin Melakukan Penelitian*

Kepada  
 Yth : PB Yanti Jaya  
 di - Makassar

Dengan hormat, Dalam rangka penyelesaian tugas akhir (skripsi) mahasiswa program studi Fisioterapi Fakultas Keperawatan Universitas Hasamuddin, maka dengan ini dimohon bantuan Bapak/Ibu dapat mengizinkan Mahasiswa kami dalam melakukan Penelitian seperti tersebut dibawah ini:

Nama : Noerhanna Dasati  
 NIM : C13115505  
 Judul Penelitian : "Pengaruh *Concentric Strengthening Exercise* terhadap *Foot Alignment*, *Malleolus Height* dan *Tingkat Agility* pada Pemain Bulu Tangkis Junior di Kota Makassar"  
 Lokasi Penelitian : PB Yanti Jaya

Demikian penyampaian kami, atas perhatian dan kerja sama yang baik diucapkan terima kasih.



Dr. H. Djohan Aras, S.Ft, Physio, M.Kes  
 Ketua Program Studi Fisioterapi

Dr. H. Djohan Aras, S.Ft, Physio, M.Kes  
 NIP.19550705 1976



## c. PB Manggala Makassar



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UNIVERSITAS HASANUDDIN  
FAKULTAS KEPERAWATAN  
JL. PERINTIS KEMERDEKAAN KAMPUS TAMALANREA KM. 10 MAKASSAR 90245  
TELP : 0411-5780104 FAX. 0411 - 586297



Makassar, 13 Februari 2019

No : 909/UN4.18.8/PL.00.00/2019  
Lamp : -  
Hal : *Permohonan izin Melakukan Penelitian*

Kepada

Yth : PB Manggala  
di - Makassar

Dengan hormat, Dalam rangka penyelesaian tugas akhir (skripsi) mahasiswa program studi Fisioterapi Fakultas Keperawatan Universitas Hasanuddin, maka dengan ini dimohon bantuan Bapak/Ibu dapat mengizinkan Mahasiswa kami dalam melakukan Penelitian seperti tersebut dibawah ini:

Nama : Noerhanna Dasati  
NIM : C13115505  
Judul Penelitian : "Pengaruh *Concentric Strengthening Exercise* terhadap *Foot Alignment*, *Malleolus Height* dan *Tingkat Agility* pada Pemain Bulu Tangkis Junior di Kota Makassar"  
Lokasi Penelitian : PB Manggala

Demikian penyampaian kami, atas perhatian dan kerja sama yang baik diucapkan terima kasih.

Wakil Dekan Bidang Akademik  
Ketua Program Studi Fisioterapi  
  
Dr. H. Djohan Aras, S.Ft, Physio, M.Kes  
NIP.19550705 1976



*Lampiran 6. Surat Keterangan Telah Meneliti*

## PB KARSA MANDIRI MAKASSAR

SEKRETARIAT GOR MAKASSAR BADMINTON CENTER (MBC)  
 JL. BORONG RAYA NO 1 INPEKSI KANAL HP 081355370909



Makassar, 18 April 2019

### SURAT KETERANGAN PENELITIAN

No : 010 / KM / IV / 2019

Yang Bertandatangan dibawah ini pimpinan Club PB Karsa Mandirimenerangkan bahwa :

Nama : Noerhanna Dasati.

NIM : C 131 15 505

Fakultas / Jurusan : Keperawatan / Fisioterapi

Instansi : Universitas Hasanuddin.

Yang tersebut diatas benar – benar telah melakukan penelitian guna penyusunan skripsi

Waktu : 03 Maret - 15 April 2019

Bertempat : Gedung Olah Raga Makassar Badminton Center ( MBC )  
 Jl Inpeksi Kanal /Borong Raya No 1 Makassar

Club : PB Karsa Mandiri Makassar

Judul Penelitian : *Pengaruh Pemberian Concentric Strengthening Exercise  
 Perubahan Foot Alignment Malleolus Heigt Dan Tingkat  
 Agility Pada Pemain Bulutangkis Junior Di Kota Makassar.*

Demikian surat keterangan kami buat untuk digunakan seperlunya.

Hormat Kami

**Mulyadi Latief**

Ketua PB Karsa Mandiri







## PB. MANGGALA

Pelatihan bulutangkis anak usia dini dan remaja

Jl. Archeology Raya Blok B No.5 Kompleks Unhas Antang Makassar 462  
Email [pbmangala.makassar@yahoo.com](mailto:pbmangala.makassar@yahoo.com) No.Telp 082271533715



### SURAT KETERANGAN PENELITIAN

NO : / / PB.MGL / 2019

Yang bertandatangan di bawah ini Ketua Umum Club PB Manggala menerangkan bahwa:

Nama : Noerhanna Dasati  
NIM : C 131 15 505  
Fakultas/Jurusan : Keperawatan/Fisioterapi  
Instansi : Universitas Hasanuddin

Yang tersebut di atas benar-benar telah melakukan penelitian guna penyusunan skripsi mulai tanggal 03 Maret – 15 April 2019. Dengan judul : **Pengaruh Pemberian *Concentric Strengthening Exercise* terhadap Perubahan *Foot Alignment*, *Malleolus Height* dan *Tingkat Agility* pada Pemain Bulu Tangkis Junior di Kota Makassar.**

Demikian surat keterangan ini kami buat untuk digunakan seperlunya.

Makassar, April 2019

PB. Manggala Makassar  
Ketua Umum



Irham Setiawan Muis



*Lampiran 7. Dokumentasi Penelitian*



**Pengukuran *Foot Alignment***



**Pengukuran *Malleolus Height***



**Pengukuran *Agility***



**Pemberian Intruksi**



*Heel Raise Exercise*



*Short Foot Exercise*



*Prone Hamstring Curl Exercise*



*Lampiran 8. Riwayat Hidup Meneliti***RIWAYAT HIDUP PENELITI**

Nama : Noerhanna Dasati  
 Tempat/Tanggal Lahir : Kendari, 27 Agustus 1997  
 Jenis Kelamin : Perempuan  
 Agama : Islam  
 Email : hannadasati@gmail.com  
 Alamat Asal : Jl.Belimbing No.20 Kel.Anduonohu Kec.Poasia  
 Alamat Sekarang : Jl.Sahabat V Pondok Gia Lestari  
 Nama Ayah : Muslimin S.E  
 Nama Ibu : Aswaarati



## Riwayat Pendidikan :

1. (2003-2009) SDN 11 Poasia
2. (2009-2012) SMP Negeri 5 Kendari
3. (2012-2015) SMAN 4 Kendari
4. (2015-2018) Program Studi S1 Fisioterapi Fakultas Keperawatan Universitas Hasanuddin

## Riwayat Organisasi :

1. (2017-2018) Anggota Divisi Kesekretariatan Himpunan Mahasiswa Fisioterapi Fakultas Keperawatan Universitas Hasanuddin (Himafisio F.Kep-UH).
2. (2018-2019) Anggota Departemen PSDM Ikatan Mahasiswa Fisioterapi Indonesia (IMFI) Wilayah V
3. (2018-2019) Majelis Permusyawaratan Mahasiswa Kema Fakultas Keperawatan Universitas Hasanuddin.

