DAFTAR PUSTAKA

1. Powers SK, Howley ET. Exercise physiology: theory and application to fitness and performance, fourth edition. New York: McGraw-Hill; 2001. p.407-22.
2. Miller JF, Bujak Z, Miller M. Sports results vs. genera physical fitness level of junior taekwondo athletes. Journal of Combat and Martial Arts. 2011;1(2):39-44.
3. Subarjah H, Si M. Latihan kondisi fisik [Internet]. 2012 [dikutip pada tanggal 16 Januari 2015]. Diunduh dari: http://fileupiedu/Direktori/FPOK/JUR_PEND_KESEHATAN_%26_REKREASI/PRODI_ILMU_KEOLAHRAGAAN/196009181986031HERMAN_SUBARJAH/LATIHAN_KONDISI_FISIK pdf.
4. Bompa TO, Haff G. Periodization: theory and methodology of training. Illinois: Human Kinetics; 2009. p.67-80.
5. Udiyana I, Kanca I, Sudarmada I. Pengaruh pelatihan modifikasi zig zag run terhadap peningkatan kecepatan dan kelincahan pada siswa putra peserta ekstrakulikuler sepak bola SMA PGRI 1 Amlapura Tahun Ajaran 2013/2014. e-Journal IKOR Universitas Pendidikan Ganesha. 2014;1:1-10.
6. Sheppard J, Young W. Agility literature review: classifications, training and testing. Journal of sports sciences. 2006;24(9):919-32.

7. Vescovi J, Rupf R, Brown T, Marques M. Physical performance characteristics of high-level female soccer players 12–21 years of age. Scandinavian journal of medicine & science in sports. 2011;21(5):670-8.
8. Dawes J, Roozen M. Developing agility and quickness. Illinois: Human Kinetics; 2012. p.1-24.
9. Taskin H. Effect of circuit training on the sprint-agility and anaerobic endurance. The Journal of Strength & Conditioning Research. 2009; 23(6): 1803-10.
10. Young WB, McDowell MH, Scarlet BJ. Specificity of sprint and agility training methods. The Journal of Strength & Conditioning Research. 2001;15(3):315-9.
11. Battinelli T. Physique, fitness, and performance. Boca Rotan (United States): CRC press LLC; 2007. p.5-10.
12. Health skill related fitness [Internet]. [dikutip pada tanggal 16 Januari 2015]. Diunduh dari: http://www.glencoe.com/sites/common_assets/health_fitness/gln_health_fitness_zone/pdf/heart_rate_monitor_activities/health_skill_related_itness/health_skill_related_fitness_activity_4.pdf.
13. Ismaryati I. Peningkatan kelincahan atlet melalui penggunaan metode kombinasi latihan sirkuit pliometrik dan berat badan. Paedagogia. 2008;11(1).
14. Brooks G, Fahey T. Exercise physiology: human bioenergetics and its application. New York: McGraw-Hill Humanities; 2004. p.3-16.

15. Karyono T. Pengaruh metode latihan dan power otot tungkai dan kelincahan [Disertasi]. Surakarta: Universitas Sebelas Maret. 2011.
16. Young W, James R, Montgomery I. Is muscle power related to running speed with changes of direction? The Journal of sports medicine and physical fitness. 2002(42):282-8.
17. Speed and agility [Internet]. [dikutip pada tanggal 16 Januari 2015]. Diunduh dari:http://www.ucs.mun.ca/~dbehm/Advanced_Fitness_Assessment/Speed_and_Agility.htm.
18. Nimphius S. Increasing agility. In: Joyce D, Lewindo D, editors. High performance training for sports. Illinois: Human Kinetics; 2014. p.185-8
19. Allford A. Agility - the most misunderstood fitness component? [Internet]. 2013 [dikutip pada tanggal 24 Februari 2015]. Diunduh dari: http://www.thesoccerstore.co.uk/blog/football-coaching/agility-misunderstood-fitness-component/.
20. Young WB, Henry BDG. Agility and change-of-direction speed are independent skills: implications for training for agility in invasion sports. International Journal of Sports Science & Coaching. 2014: 1-14.
21. Ganong WF, Barrett KE. Review of medical physiology. New York: McGraw-Hill Medical; 2005. p.197-9.
22. Brown L, Ferrigno V. Training for speed, agility, and quickness, 3E. Illinois: Human Kinetics; 2014. p.2-8.

23. Atiq A, Yunitaningrum W. Kekuatan otot tungkai dan kelincahan terhadap kecepatan dribbling sepak bola di SMAN 1 Tebas. Jurnal Pendidikan dan Pembelajaran. 2014;3(6):1-12.
24. Tanner R, Gore C. Physiological tests for elite athletes. Illinois: Human Kinetics; 2013. p.132.
25. Mackenzie B. Performance evaluation tests. USA: Peak Performance. 2005. p.55-72.
26. Heikkinen D. Physical testing characteristics and technical event performance of junior alpine ski racers [Disertasi]. Farmington (United States): The University of Maine. 2003.
27. Pratama I, Budiawan M, Sudarmada I. Pengaruh pelatihan three corner drill terhadap peningkatan kelincahan dan power. e-Journal IKOR Universitas Pendidikan Ganesha. 2014;1:1-7.
28. Mackenzie B. Training principles [Internet]. 2000 [dikutip pada tanggal 16 Januari 2015]. Diunduh dari: http://www.brianmac.co.uk/trnprin.htm.
29. Guyton, Hall J. Fisiologi kedokteran. Jakarta: EGC; 2008. h.1339-43.
30. Sidik DZ, Imanudin I, Affari L. Penerapan complex training terhadap peningkatan kemampuan anaerobik. Jurnal Iptek Olahraga. 2012;14(2):124-42.
31. Kravitz L, Beltz N, Jonathan N, Mike. Anaerobic metabolic conditioning [Internet]. 2014 [dikutip pada tanggal 7 Januari 2015]. Diunduh dari: https://www.unm.edu/~lkravitz/Article%20folder/Anaerobic.pdf.

32. Anaerobic exercise for physical fitness [Internet]. 2004 [Dikutip pada tanggal 26 Januari 2015]. Diunduh dari: http://www.weightawareness.com/topics/doc.xml?doc_id=1360.
33. Bishop D, Girard O, Mendez-Villanueva A. A repeated sprint ability part II: recommedations for training. Sports Medicine. 2011;41(9):742-56.
34. McArdle WD, Frank I, Katch, Victor LK. Exercise physiology: nutrition, energy, and human performance. Philadelphia: Lippincott Williams & Wilkins; 2010. p.480-3.
35. Hawley JA. Specificity of training adaptation: time for a rethink? The Journal of Physiology. 2008;586(1):1-2.
36. Coburn JW, Malek MH. NSCA's essentials of personal training. Illinois: Human Kinetics. 2011. p.71-83.
37. Chaleh M, Fatemi R, Shahsavar A. Relationship between speed, agility, and anaerobic power of 14-16 years elite soccer players. Int J Appl Basic Sci 3. 2012;3(2):427-432.
38. Swadesi, I. Perkembangan dan belajar motorik. Singaraja: Buku Ajar. 2009.

Lampiran 1. *Ethical Clearance*

KOMISI ETIK PENELITIAN KESEHATAN (KEPK)
FAKULTAS KEDOKTERAN UNIVERSITAS DIPONEGORO
DAN RSUP dr KARIADI SEMARANG
Sekretariat : Kantor Dekanat FK Undip Lt.3
Jl. Dr. Soetomo 18, Semarang
Telp/Fax. 024-8318350

RSUP Dr. KARIADI

ETHICAL CLEARANCE
No. 154/EC/FK-RSDK/2015

Komisi Etik Penelitian Kesehatan Fakultas Kedokteran Universitas Diponegoro- RSUP. Dr. Kariadi Semarang, setelah membaca dan menelaah Usulan Penelitian :

Judul : Pengaruh latihan Anaerobik terhadap daya ledak otot pada anak usia 10-14 tahun
Peneliti : ***Amalia Rahma Fathinita***

Judul : Pengaruh latihan Anaerobik terhadap kelincahan pada anak usia 10-14 tahun
Peneliti : ***Afifah Preyanka Dumi***

Judul : Pengaruh latihan Anaerobik terhadap kadar Asam Laktat pada anak usia 10-14 tahun
Peneliti : ***Agus Darmawan***

Pembimbing : 1. dr. Edwin Basyar, M.Kes, Sp.B, Sp.BA
2. dr. A. Ari Adrianto, Sp.B, Sp.BD

Penelitian : Dilaksanakan di Sekolah Sepak Bola Tugu Muda Semarang

Setuju untuk dilaksanakan, dengan memperhatikan prinsip-prinsip yang dinyatakan dalam Deklarasi Helsinki 1975, yang diamendec di Seoul 2008 dan Pedoman Nasional Etik Penelitian Kesehatan (PNEPK) Departemen Kesehatan RI 2011

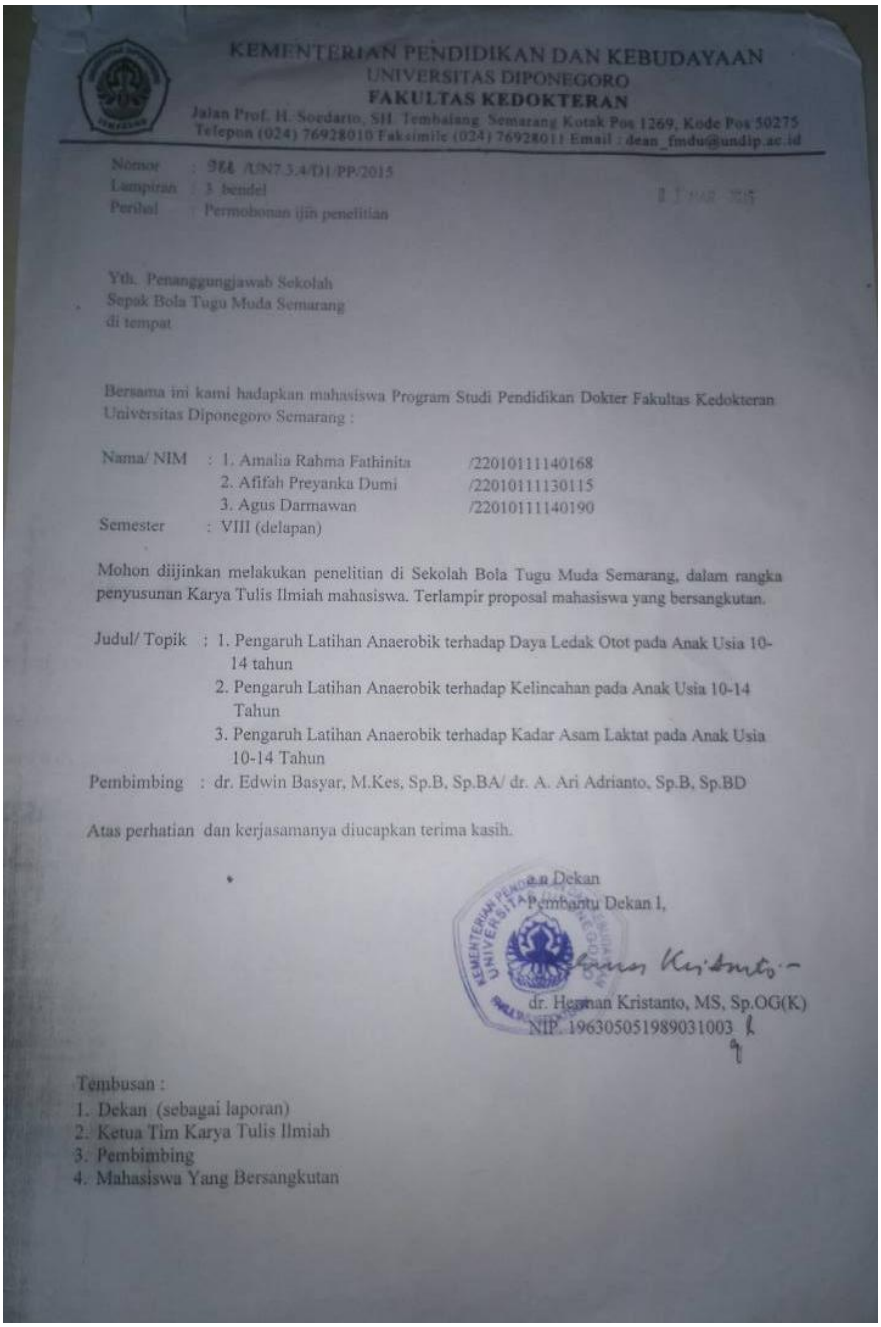
Peneliti harus melampirkan 2 kopi lembar Informed consent yang telah disetujui dan ditandatangani oleh peserta penelitian pada laporan penelitian.
Peneliti diwajibkan menyerahkan :

- Laporan kemajuan penelitian (*clinical trial*)
- Laporan kejadian efek samping jika ada
- Laporan ke KEPK jika penelitian sudah selesai & dilampiri Abstrak Penelitian

Semarang, 06 APR 2015
Komisi Etik Penelitian Kesehatan
Fakultas Kedokteran Undip-RS. Dr. Kariadi
Sekretaris,

Dr.dr.Setyawati Budijitno,M.Si.Med,Sp.B,Sp.B(K),Onk,FICS
NIP. 19710807 200812 1 001

Lampiran 2. Ijin Penelitian



KEMENTERIAN PENDIDIKAN DAN KEBUDAYAAN
UNIVERSITAS DIPONEGORO
FAKULTAS KEDOKTERAN
Jalan Prof. H. Soedarto, SH Tembalang Semarang Kotak Pos 1269, Kode Pos 50275
Telepon (024) 76928010 Faksimile (024) 76928011 Email : dean_fmdu@undip.ac.id

Nomor : 964 /UN7.3.4/DI/PP/2015
Lampiran : 3 bendel
Perihal : Permohonan ijin penelitian

Yth. Penanggungjawab Sekolah
Sepak Bola Tugu Muda Semarang
di tempat

Bersama ini kami hadapkan mahasiswa Program Studi Pendidikan Dokter Fakultas Kedokteran Universitas Diponegoro Semarang :

Nama/ NIM : 1. Amalia Rahma Fathinita /22010111140168
2. Afifah Preyanka Dumi /22010111130115
3. Agus Darmawan /22010111140190
Semester : VIII (delapan)

Mohon diijinkan melakukan penelitian di Sekolah Bola Tugu Muda Semarang, dalam rangka penyusunan Karya Tulis Ilmiah mahasiswa. Terlampir proposal mahasiswa yang bersangkutan.

Judul/ Topik : 1. Pengaruh Latihan Anaerobik terhadap Daya Ledak Otot pada Anak Usia 10-14 tahun
2. Pengaruh Latihan Anaerobik terhadap Kelincahan pada Anak Usia 10-14 Tahun
3. Pengaruh Latihan Anaerobik terhadap Kadar Asam Laktat pada Anak Usia 10-14 Tahun
Pembimbing : dr. Edwin Basyar, M.Kes, Sp.B, Sp.BA/ dr. A. Ari Adrianto, Sp.B, Sp.BD

Atas perhatian dan kerjasamanya diucapkan terima kasih.

a.n Dekan
Pembantu Dekan I,

dr. Hermian Kristanto, MS, Sp.OG(K)
NIP. 196305051989031003

Tembusan :
1. Dekan (sebagai laporan)
2. Ketua Tim Karya Tulis Ilmiah
3. Pembimbing
4. Mahasiswa Yang Bersangkutan

Lampiran 3. *Informed Consent*

Lampiran 1. *Informed Consent*

JUDUL PENELITIAN : Pengaruh Latihan Anaerobik terhadap Kelincahan pada Anak Usia 10-14

INSTANSI PELAKSANA : Fakultas Kedokteran Universitas Diponegoro

PENELITI : Afifah Preyanka Dumi

Persetujuan Setelah Penjelasan
(INFORMED CONSENT)

Bapak /Ibu/Sdr/i Yth :

Peneliti tersebut di atas adalah Mahasiswa Fakultas Kedokteran Universitas Diponegoro yang bermaksud ingin melibatkan siswa sekolah sepak bola usia 10-14 tahun untuk menjadi responden dalam penelitian ini yang bertujuan untuk mengetahui pengaruh latihan anaerobik terhadap kelincahan pada anak usia 10-14 tahun. Manfaat penelitian ini bagi subjek adalah memberi latihan demi peningkatkan kondisi fisik yaitu kelincahan.

Pada penelitian ini akan dilakukan latihan anaerobik berupa *sprint* berulang yang akan dilakukan dalam periode latihan selama 12 minggu. Seluruh biaya yang diperlukan dan berhubungan dengan penelitian menjadi tanggung jawab peneliti.

Identitas dan hasil pemeriksaan yang diperoleh akan dirahasiakan. Subjek berhak menolak untuk diikutsertakan dalam penelitian dengan alasan apapun, serta tidak ada konsekuensi apapun apabila tidak ikut serta dalam penelitian.

Penanggung Jawab penelitian adalah dr. Edwin Basyar, M.Kes, Sp.B, Sp.BA dan dr. A. Ari Adrianto, Sp.B, Sp.BD dari bagian Ilmu Fisika Medik Fakultas Kedokteran Universitas Diponegoro.

Terima kasih atas kerjasama Anda.

Setelah mendengar dan memahami penjelasan Penelitian, dengan ini saya menyatakan

SETUJU / ~~TIDAK SETUJU~~

Untuk ikut sebagai responden / sampel penelitian.

Semarang, 9 Maret 2015

Saksi :

Nama Terang : Amalia R. Fathinita
Alamat : Jl. Sipodang, Tembalang

Nama Terang : (ERLANGGA SETIAWAN)
Alamat : KAVLING BRT 3/16 PALEBON SMG

Lampiran 4. Data Hasil Pengukuran Waktu Tes Kelincahan

No.	Nama	Kelompok	Umur	TB (cm)	BB (kg)	*Pre-test* (detik)	*Middle-test* (detik)	*Post-test* (detik)
1	Subjek 1	Kontrol	10	135	30	51,02	48,51	38,01
2	Subjek 2	Kontrol	10	142	40	58,19	45,00	43,50
3	Subjek 3	Kontrol	10	136	30	42,01	43,00	45,10
4	Subjek 4	Kontrol	10	135	38	59,50	58,00	59,05
5	Subjek 5	Kontrol	10	137	42	59,00	50,05	48,00
6	Subjek 6	Kontrol	10	135	25	40,31	37,00	37,15
7	Subjek 7	Kontrol	10	135	29	47,10	58,00	54,01
8	Subjek 8	Kontrol	13	144	39	27	26,09	24,76
9	Subjek 9	Kontrol	12	136	33	34,18	38,00	35,08
10	Subjek 10	Kontrol	11	146	35	26,37	24,00	26,87
11	Subjek 11	Kontrol	11	135	30	30,04	25,08	28,32
12	Subjek 12	Kontrol	11	137	30	36,00	33,09	32,75
13	Subjek 13	Kontrol	11	137	30	40,00	44,00	43,01
14	Subjek 14	Kontrol	10	137	29	38	35	34,56
15	Subjek 15	Kontrol	10	140	45	47,75	52,94	50,34
16	Subjek 16	Kontrol	10	135	34	58,22	37,00	34,06
17	Subjek 17	Perlakuan	11	135	31	41,00	30,16	26,67
18	Subjek 18	Perlakuan	11	136	30	37,00	31,41	28,12
19	Subjek 19	Perlakuan	10	142	33	51,89	36,41	22,90
20	Subjek 20	Perlakuan	11	137	31	39,41	38,00	31,82
21	Subjek 21	Perlakuan	11	136	29	36,56	30,36	24,81
22	Subjek 22	Perlakuan	11	140	33	36,01	29,00	23,05
23	Subjek 23	Perlakuan	10	135	30	31,00	27,69	23,44
24	Subjek 24	Perlakuan	11	146	40	44,01	30,90	23,76
25	Subjek 25	Perlakuan	10	135	28	39,66	32,74	24,25
26	Subjek 26	Perlakuan	11	139	29	33,40	27,06	25,00
27	Subjek 27	Perlakuan	11	143	33	39,15	28,91	25,61
28	Subjek 28	Perlakuan	11	144	32	33,00	31,00	26,07
29	Subjek 29	Perlakuan	10	140	30	30,99	21,61	21,41
30	Subjek 30	Perlakuan	10	140	35	34,03	32,00	29,28
31	Subjek 31	Perlakuan	10	144	40	42,81	41,75	34,63
32	Subjek 32	Perlakuan	10	139	30	24,52	21,75	19,81

Lampiran 5. Hasil Analisis Statistik

Means

Report

	Umur	TB (cm)	BB (kg)	Pre-Test (detik)	Middle-Test (detik)	Post-Test (detik)
Mean	10.563	138.531	32.906	40.2853	35.7972	32.6625
Std. Deviation	.7156	3.6099	4.6998	9.63811	9.90065	10.24647
Median	10.000	137.000	31.000	39.2800	32.9150	28.8000
Minimum	10.0	135.0	25.0	24.52	21.61	19.81
Maximum	13.0	146.0	45.0	59.50	58.00	59.05

Normality Test

Descriptives

			Statistic	Std. Error
Umur	Mean		10.563	.1265
	95% Confidence Interval for Mean	Lower Bound	10.304	
		Upper Bound	10.821	
	5% Trimmed Mean		10.479	
	Median		10.000	
	Variance		.512	
	Std. Deviation		.7156	
	Minimum		10.0	
	Maximum		13.0	
	Range		3.0	
	Interquartile Range		1.0	
	Skewness		1.457	.414
	Kurtosis		2.920	.809
TB (cm)	Mean		138.531	.6381
	95% Confidence Interval for Mean	Lower Bound	137.230	
		Upper Bound	139.833	
	5% Trimmed Mean		138.313	
	Median		137.000	
	Variance		13.031	
	Std. Deviation		3.6099	
	Minimum		135.0	
	Maximum		146.0	

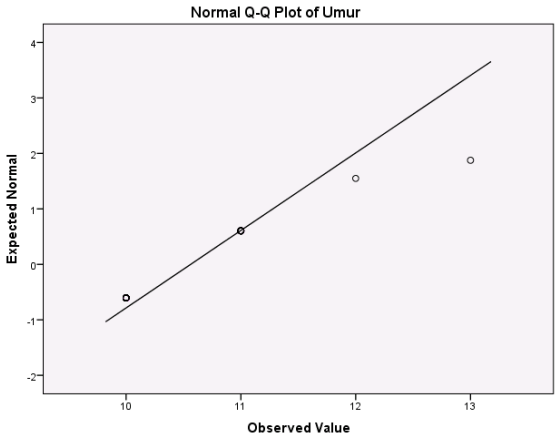
	Range		11.0	
	Interquartile Range		6.5	
	Skewness		.754	.414
	Kurtosis		-.730	.809
	Mean		32.906	.8308
	95% Confidence Interval for Mean	Lower Bound	31.212	
		Upper Bound	34.601	
	5% Trimmed Mean		32.674	
	Median		31.000	
	Variance		22.088	
BB (kg)	Std. Deviation		4.6998	
	Minimum		25.0	
	Maximum		45.0	
	Range		20.0	
	Interquartile Range		5.0	
	Skewness		.956	.414
	Kurtosis		.218	.809

Tests of Normality

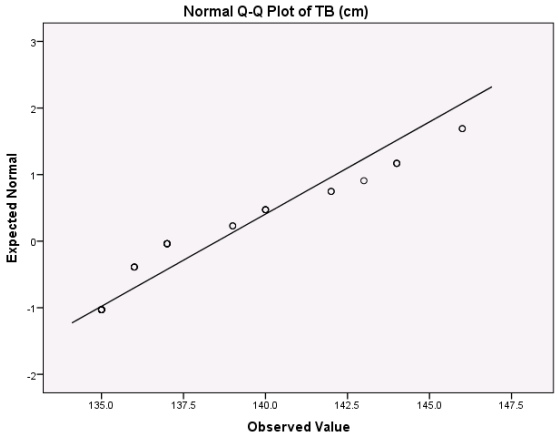
	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Umur	.315	32	.000	.713	32	.000
TB (cm)	.227	32	.000	.857	32	.001
BB (kg)	.201	32	.002	.887	32	.003

a. Lilliefors Significance Correction

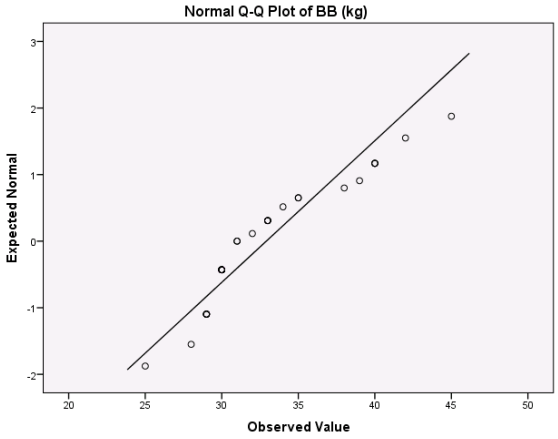
Umur



TB (cm)



BB (kg)



Descriptives

			Statistic	Std. Error
Pre-Test (detik)	Mean		40.2853	1.70379
	95% Confidence Interval for Mean	Lower Bound	36.8104	
		Upper Bound	43.7602	
	5% Trimmed Mean		40.0656	
	Median		39.2800	
	Variance		92.893	
	Std. Deviation		9.63811	
	Minimum		24.52	
	Maximum		59.50	
	Range		34.98	
	Interquartile Range		12.77	

	Skewness		.603	.414
	Kurtosis		-.285	.809
	Mean		35.7972	1.75020
	95% Confidence Interval for Mean	Lower Bound	32.2276	
		Upper Bound	39.3668	
	5% Trimmed Mean		35.3490	
	Median		32.9150	
	Variance		98.023	
Middle-Test (detik)	Std. Deviation		9.90065	
	Minimum		21.61	
	Maximum		58.00	
	Range		36.39	
	Interquartile Range		13.76	
	Skewness		.773	.414
	Kurtosis		-.076	.809
	Mean		32.6625	1.81134
	95% Confidence Interval for Mean	Lower Bound	28.9683	
		Upper Bound	36.3567	
	5% Trimmed Mean		31.9822	
	Median		28.8000	
	Variance		104.990	
Post-Test (detik)	Std. Deviation		10.24647	
	Minimum		19.81	
	Maximum		59.05	
	Range		39.24	
	Interquartile Range		13.02	
	Skewness		1.013	.414
	Kurtosis		.218	.809

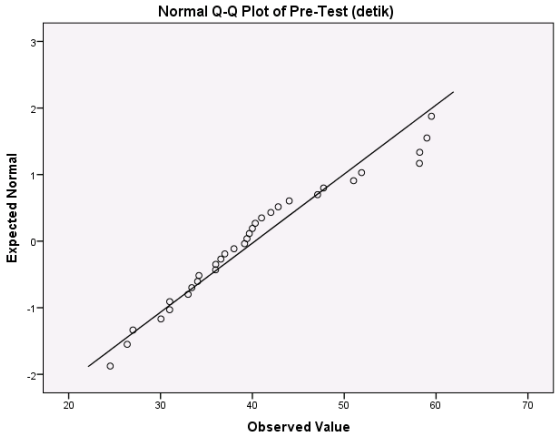
Tests of Normality

	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Pre-Test (detik)	.127	32	.200*	.941	32	.078
Middle-Test (detik)	.139	32	.119	.935	32	.053
Post-Test (detik)	.164	32	.028	.894	32	.004

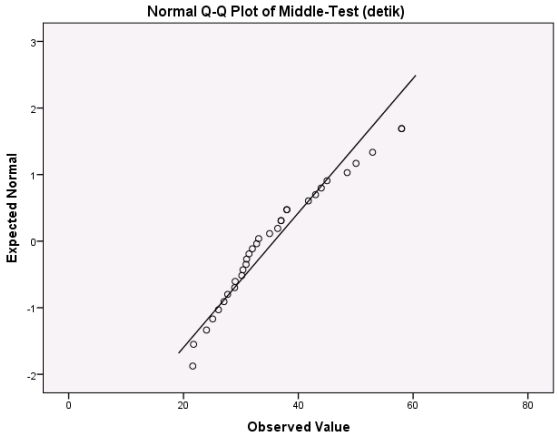
*. This is a lower bound of the true significance.

a. Lilliefors Significance Correction

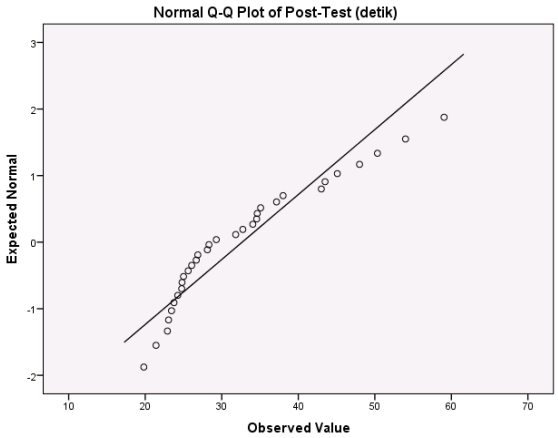
Pre-Test (detik)



Middle-Test (detik)



Post-Test (detik)



T-Test (Pre-test dan Middle-test)

Group Statistics

	Kelompok	N	Mean	Std. Deviation	Std. Error Mean
Pre-Test (detik)	Kontrol	16	43.4181	11.43403	2.85851
	Perlakuan	16	37.1525	6.34858	1.58715
Middle-Test (detik)	Kontrol	16	40.9225	10.93036	2.73259
	Perlakuan	16	30.6719	5.20264	1.30066

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Pre-Test (detik)	Equal variances assumed	7.803	.009	1.916	30	.065	6.26563	3.26957	-.41173	12.94298
	Equal variances not assumed			1.916	23.446	.068	6.26563	3.26957	-.49089	13.02214
Middle-Test (detik)	Equal variances assumed	10.184	.003	3.387	30	.002	10.25063	3.02635	4.07000	16.43125
	Equal variances not assumed			3.387	21.465	.003	10.25063	3.02635	3.96528	16.53597

Mann-Whitney Test (Post-test)

Ranks

	Kelompok	N	Mean Rank	Sum of Ranks
Post-Test (detik)	Kontrol	16	23.31	373.00
	Perlakuan	16	9.69	155.00
	Total	32		

Test Statistics[a]

	Post-Test (detik)
Mann-Whitney U	19.000
Wilcoxon W	155.000
Z	-4.108
Asymp. Sig. (2-tailed)	.000
Exact Sig. [2*(1-tailed Sig.)]	.000[b]

a. Grouping Variable: Kelompok

b. Not corrected for ties.

Normality Test: Kelompok Perlakuan

Tests of Normality

	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Pre-Test (detik)	.103	16	.200*	.976	16	.924
Middle-Test (detik)	.158	16	.200*	.948	16	.456
Post-Test (detik)	.146	16	.200*	.941	16	.361
Selisih Pre-Test dengan Middle-Test	.141	16	.200*	.935	16	.292
Selisih Pre-Test dengan Post-Test	.182	16	.160	.854	16	.016
Selisih Middle-Test dengan Post-Test	.126	16	.200*	.927	16	.219

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

a. Lilliefors Significance Correction

Normality Test: Kelompok Perlakuan (Transformasi)

Tests of Normality

	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Pre - Post Trf	.114	16	.200*	.969	16	.815
Pre - Mid Trf	.185	16	.148	.936	16	.305
Mid - Post Trf	.126	16	.200*	.927	16	.219

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

a. Lilliefors Significance Correction

General Linear Model Repeated Anova Test

Descriptive Statistics

	Mean	Std. Deviation	N
Pre-Test (detik)	37.1525	6.34858	16
Middle-Test (detik)	30.6719	5.20264	16
Post-Test (detik)	25.6644	3.80484	16

Multivariate Tests[a]

Effect		Value	F	Hypothesis df	Error df	Sig.
factor1	Pillai's Trace	.787	25.801[b]	2.000	14.000	.000
	Wilks' Lambda	.213	25.801[b]	2.000	14.000	.000
	Hotelling's Trace	3.686	25.801[b]	2.000	14.000	.000
	Roy's Largest Root	3.686	25.801[b]	2.000	14.000	.000

a. Design: Intercept

Within Subjects Design: factor1

b. Exact statistic

Mauchly's Test of Sphericity[a]

Measure: MEASURE_1

Within Subjects Effect	Mauchly's W	Approx. Chi-Square	df	Sig.	Epsilon[b]		
					Greenhouse-Geisser	Huynh-Feldt	Lower-bound
factor1	.432	11.746	2	.003	.638	.671	.500

Tests the null hypothesis that the error covariance matrix of the orthonormalized transformed dependent variables is proportional to an identity matrix.

a. Design: Intercept

Within Subjects Design: factor1

b. May be used to adjust the degrees of freedom for the averaged tests of significance. Corrected tests are displayed in the Tests of Within-Subjects Effects table.

Tests of Within-Subjects Effects

Measure: MEASURE_1

Source		Type III Sum of Squares	df	Mean Square	F	Sig.
factor1	Sphericity Assumed	1061.603	2	530.802	46.630	.000
	Greenhouse-Geisser	1061.603	1.276	832.223	46.630	.000
	Huynh-Feldt	1061.603	1.341	791.410	46.630	.000

	Lower-bound	1061.603	1.000	1061.603	46.630	.000
Error(factor1)	Sphericity Assumed	341.494	30	11.383		
	Greenhouse-Geisser	341.494	19.134	17.847		
	Huynh-Feldt	341.494	20.121	16.972		
	Lower-bound	341.494	15.000	22.766		

Tests of Within-Subjects Contrasts

Measure: MEASURE_1

Source	factor1	Type III Sum of Squares	df	Mean Square	F	Sig.
factor1	Linear	1055.816	1	1055.816	53.991	.000
	Quadratic	5.787	1	5.787	1.802	.199
Error(factor1)	Linear	293.330	15	19.555		
	Quadratic	48.165	15	3.211		

Tests of Between-Subjects Effects

Measure: MEASURE_1

Transformed Variable: Average

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Intercept	46614.114	1	46614.114	788.967	.000
Error	886.237	15	59.082		

Estimated Marginal Means

1. Grand Mean

Measure: MEASURE_1

Mean	Std. Error	95% Confidence Interval	
		Lower Bound	Upper Bound
31.163	1.109	28.798	33.528

2. factor1

Estimates

Measure: MEASURE_1

factor1	Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
1	37.153	1.587	33.770	40.535

2	30.672	1.301	27.900	33.444
3	25.664	.951	23.637	27.692

Pairwise Comparisons

Measure: MEASURE_1

(I) factor1	(J) factor1	Mean Difference (I-J)	Std. Error	Sig.[b]	95% Confidence Interval for Difference[b]	
					Lower Bound	Upper Bound
1	2	6.481*	1.093	.000	3.537	9.425
	3	11.488*	1.563	.000	7.277	15.700
2	1	-6.481*	1.093	.000	-9.425	-3.537
	3	5.008*	.794	.000	2.870	7.145
3	1	-11.488*	1.563	.000	-15.700	-7.277
	2	-5.008*	.794	.000	-7.145	-2.870

Based on estimated marginal means

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

b. Adjustment for multiple comparisons: Bonferroni.

Multivariate Tests

	Value	F	Hypothesis df	Error df	Sig.
Pillai's trace	.787	25.801[a]	2.000	14.000	.000
Wilks' lambda	.213	25.801[a]	2.000	14.000	.000
Hotelling's trace	3.686	25.801[a]	2.000	14.000	.000
Roy's largest root	3.686	25.801[a]	2.000	14.000	.000

Each F tests the multivariate effect of factor1. These tests are based on the linearly independent pairwise comparisons among the estimated marginal means.

a. Exact statistic

Lampiran 6. Dokumentasi Penelitian

Gambar. Latihan *sprint*

Gambar. *Hexagonal Obstacle Test*

Lampiran 7. Biodata Mahasiswa

Identitas

Nama	: Afifah Preyanka Dumi
NIM	: 22010111130115
Tempat/tanggal lahir	: Jakarta, 23 Oktober 1993
Jenis kelamin	: Perempuan
Alamat	: Jalan Sipodang no.8P, Tembalang, Semarang
Nomor Telepon	: -
Nomor HP	: 087879258653
e-mail	: apreyanka@yahoo.co.id

Riwayat Pendidikan Formal

1. SD	: SDN Teluk Pucung VII	Lulus tahun	: 2005
2. SMP	: SMPN 1 Bekasi	Lulus tahun	: 2008
3. SMA	: SMAN 1 Bekasi	Lulus tahun	: 2011
4. S1	: Pendidikan Dokter FK UNDIP	Masuk tahun	: 2011

Keanggotaan Organisasi

1. HIMA KU Undip	Tahun 2012-2013
2. Asian Medical Students' Association (AMSA) Undip	Tahun 2012-2013