

LAMPIRAN

Lampiran 1. Surat Ijin Penelitian

Yogyakarta, 13 Maret 2012

Hal : Permohonan Ijin Penelitian

Kepada Yth.

**Ibu Avie Kuntari A. Manajer Club Arena *Fitness* Jayakarta Hotel
di Yogyakarta**

Dengan hormat, disampaikan bahwa untuk keperluan pengambilan data dalam rangka penulisan Tugas Akhir Skripsi, saya mohon Ibu Avie Kuntari Astarini berkenan untuk memberikan ijin :

Nama : Puji Santoso

Nomor Mahasiswa : 08603141004

Program Studi : Ilmu Keolahragaan

Judul Skripsi : “Efektifitas Latihan Beban Dengan Metode *Compound Set* Dan *Set System* Terhadap *Hypertrophy* Otot Lengan Member *Fitness* “Club Arena International”.

Pelaksanaan pengambilan data :

Waktu : 15 maret 2012 s/d 15 Mei 2012

Tempat/ objek : *Fitness Centre* Club Arena International Hotel
Jayakarta

Atas perhatian, bantuan dan terkabulnya permohonan ini, diucapkan terima kasih.

Yogyakarta, 13 Maret 2012

Rumpis Agus Sudarko, M.S
NIP 19600824 1986011 001

Lampiran 2. Program Latihan

Program Latihan *Hypertrophy* Otot Lengan Metode *Compound Set*

Nama : Frekuensi Latihan :
Umur : Lama Latihan :
Jenis Kelamin : Recovery :
Tujuan Latihan : Irama :

LATIHAN OTOT *BICEPS*

NO	LATIHAN	RM	BBN	BULAN 1				BULAN 2			
				1	2	3	4	1	2	3	4
1	ARM CURL										
2	HUMMER CURL										
1	REVERSE BARBELL CURL										
2	BARBELL CURL										

1	LOW PULLEY CURL										
2	CONCEN- TRATION BICEP CURL										

LATIHAN OTOT *TRICEPS*

NO	LATIHAN	1 RM	BBN	BULAN 1				BULAN 2			
				1	2	3	4	1	2	3	4
1	PUSH DOWN										
2	DUMBBELL TRICEPS EXTENTION										
1	SEATED DUMBBELL TRICEPS EKSTENTION										
2	TRICEP KICK BACK										

1	TRICEP DIPS										
2	REVERSE PUSH DOWN										

Program Latihan *Hypertrophy* Otot Lengan Metode *Set System*

Nama :	Frekuensi Latihan :
Umur :	Lama Latihan :
Jenis Kelamin :	Recovery :
Tujuan Latihan :	Irama :

LATIHAN OTOT *BICEPS*

NO	LATIHAN	RM	BBN	BULAN 1				BULAN 2			
				1	2	3	4	1	2	3	4
1	ARM CURL										
2	HUMMER CURL										
3	REVERSE BARBELL CURL										
4	BARBELL CURL										

5	LOW PULLEY CURL										
6	CONCEN- TRATION BICEP CURL										

LATIHAN OTOT *TRICEPS*

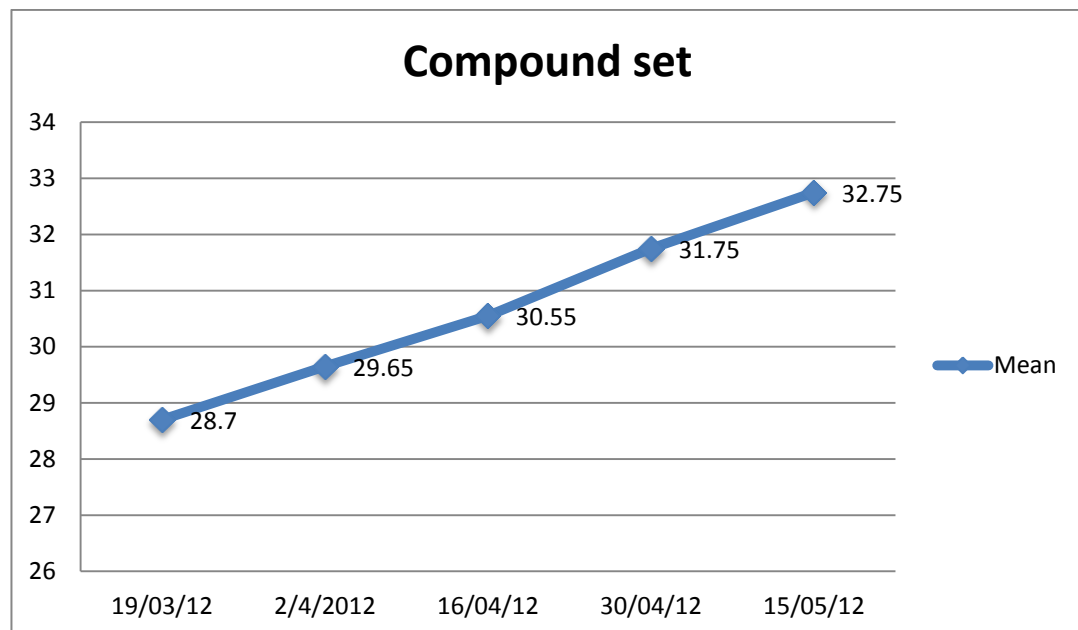
NO	LATIHAN	RM	BBN	BULAN 1				BULAN 2			
				1	2	3	4	1	2	3	4
1	PUSH DOWN										
2	DUMBBELL TRICEPS EXTENTION										
3	SEATED DUMBBELL TRICEPS EKSTENTION										
4	TRICEP KICK BACK										

5	TRICEP DIPS										
6	REVERSE PUSH DOWN										

Lampiran 3. Data Penelitian

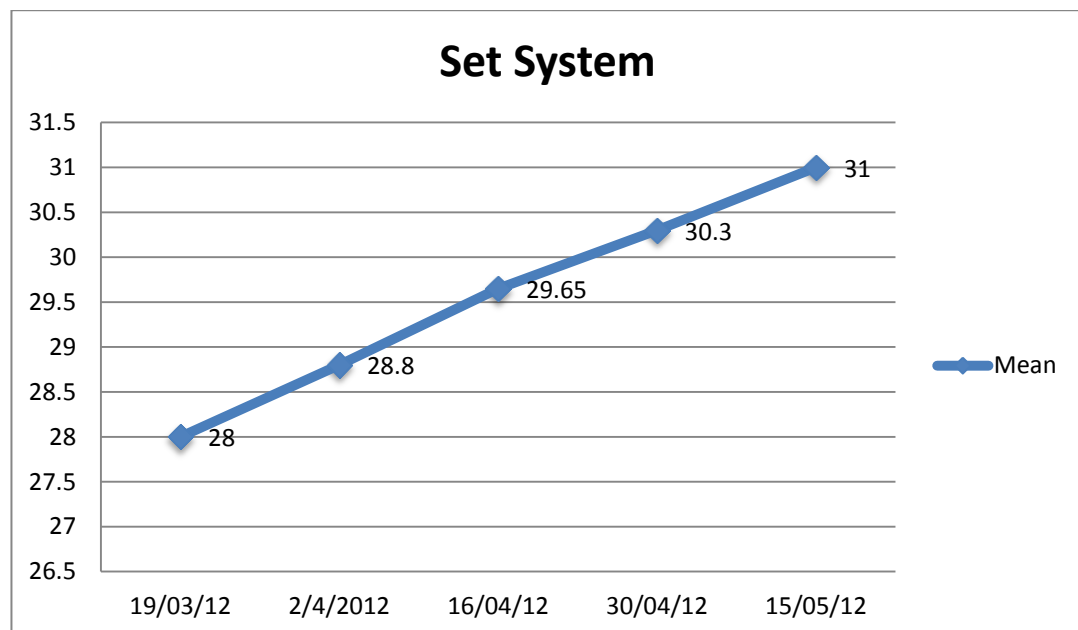
Data Penelitian Metode Latihan *Compound Set*

No	Nama	(19/03/12) Pretest	(2/04/12)	(16/04/12)	(30/04/12)	(15/05/12) Posttest
1	Yudha	31	32	32,5	33,5	34
2	Ari	28	29	29,5	30,5	31.5
3	Orlando	30	30.5	31	32	32.5
4	Ivan	28	29	30	31,5	33
5	Heri	28	29	29,5	31	32
6	Agus	27	28	29	31	32
7	Denny	28	29	30,5	31	32
8	Andreas	28	29	30	31	32
9	Prio	29	30	31,5	33	35
10	Toro	30	31	32	33	33.5
Mean		28,7	29,65	30,55	31,75	32,75



Data Penelitian Metode Set System

No	Nama	(19/03/12) Pretest	(2/04/12)	(16/04/12)	(30/04/12)	(21/05/12) Posttest
1	Andre	30	30,5	31	32	32.5
2	Robertus	30	31	32	32,5	33
3	Stedi	27	27,5	28	28,5	29
4	Aryo	26	27	28,5	29	29.5
5	Nicko	28	28,5	29,5	30	31
6	Indra	27	28	29	30	31
7	Tommy	25	26	27,5	28	29
8	Sigit	31	31,5	32	32,5	33
9	Hendra	29	30	30,5	31,5	32
10	Budi	27	28	28,5	29	30
Mean		28	28.8	29.65	30.3	31



Lampiran 4. Statistik Penelitian

FREQUENCIES VARIABLES=VAR00001 VAR00002
 /STATISTICS=STDDEV MINIMUM MAXIMUM MEAN MEDIAN MODE SUM
 /ORDER=ANALYSIS.

Frequencies

Statistics		Compound set (pretest)	Compound set (posttest)
N	Valid	10	10
	Missing	0	0
Mean		28.7000	32.7500
Median		28.0000	32.2500
Mode		28.00	32.00
Std. Deviation		1.25167	1.11181
Minimum		27.00	31.50
Maximum		31.00	35.00
Sum		287.00	327.50

Frequency Table

Compound set (pretest)					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	27	1	10.0	10.0	10.0
	28	5	50.0	50.0	60.0
	29	1	10.0	10.0	70.0
	30	2	20.0	20.0	90.0
	31	1	10.0	10.0	100.0
	Total	10	100.0	100.0	

Compound set (posttest)					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	31.5	1	10.0	10.0	10.0
	32	4	40.0	40.0	50.0
	32.5	1	10.0	10.0	60.0
	33	1	10.0	10.0	70.0
	33.5	1	10.0	10.0	80.0
	34	1	10.0	10.0	90.0
	35	1	10.0	10.0	100.0
	Total	10	100.0	100.0	

FREQUENCIES VARIABLES=VAR00003 VAR00004
 /STATISTICS=STDDEV MINIMUM MAXIMUM MEAN MEDIAN MODE SUM
 /ORDER=ANALYSIS.

Frequencies

Statistics			
		Set System (pretest)	Set System (Posttest)
N	Valid	10	10
	Missing	0	0
Mean		28.0000	31.0000
Median		27.5000	31.0000
Mode		27.00	29.00 ^a
Std. Deviation		1.94365	1.58114
Minimum		25.00	29.00
Maximum		31.00	33.00
Sum		280.00	310.00

a. Multiple modes exist. The smallest value is shown

Frequency Table

Set System (pretest)					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	25	1	10.0	10.0	10.0
	26	1	10.0	10.0	20.0
	27	3	30.0	30.0	50.0
	28	1	10.0	10.0	60.0
	29	1	10.0	10.0	70.0
	30	2	20.0	20.0	90.0
	31	1	10.0	10.0	100.0
	Total	10	100.0	100.0	

Set System (Posttest)					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	29	2	20.0	20.0	20.0
	29.5	1	10.0	10.0	30.0
	30	1	10.0	10.0	40.0
	31	2	20.0	20.0	60.0
	32	1	10.0	10.0	70.0
	32.5	1	10.0	10.0	80.0

33	2	20.0	20.0	100.0
Total	10	100.0	100.0	

Lampiran 5. Uji Normalitas

NPARTEST
/CHISQUARE=VAR00001 VAR00002
/EXPECTED=EQUAL
/STATISTICS DESCRIPTIVES
/MISSING ANALYSIS.

NPar Tests

Descriptive Statistics

	N	Mean	Std. Deviation	Minimum	Maximum
Compound set (pretest)	10	28.7000	1.25167	27.00	31.00
Compound set (posttest)	10	32.7500	1.11181	31.50	35.00

Chi-Square Test

Test Statistics

	Compound set (pretest)	Compound set (posttest)
Chi-Square	6.000 ^a	5.400 ^b
df	4	6
Asymp. Sig.	.199	.494

a. 5 cells (100.0%) have expected frequencies less than 5. The minimum expected cell frequency is 2.0.

b. 7 cells (100.0%) have expected frequencies less than 5. The minimum expected cell frequency is 1.4.

NPAR TEST
 /CHISQUARE=VAR00003 VAR00004
 /EXPECTED=EQUAL
 /STATISTICS DESCRIPTIVES
 /MISSING ANALYSIS.

NPar Tests

Descriptive Statistics					
	N	Mean	Std. Deviation	Minimum	Maximum
Set System (pretest)	10	28.0000	1.94365	25.00	31.00
Set System (Posttest)	10	31.0000	1.58114	29.00	33.00

Chi-Square Test

Test Statistics		
	Set System (pretest)	Set System (Posttest)
Chi-Square	2.600 ^a	1.200 ^a
df	6	6
Asymp. Sig.	.857	.977

a. 7 cells (100.0%) have expected frequencies less than 5. The minimum expected cell frequency is 1.4.

Lampiran 6. Uji Homogenitas

ONEWAY VAR00001 BY VAR00002
/STATISTICS HOMOGENEITY
/MISSING ANALYSIS.

Oneway

Test of Homogeneity of Variances

Compound set

Levene Statistic	df1	df2	Sig.
.280	1	18	.603

ANOVA

Compound set					
	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	82.013	1	82.013	58.522	.000
Within Groups	25.225	18	1.401		
Total	107.238	19			

ONEWAY VAR00003 BY VAR00004
 /STATISTICS HOMOGENEITY
 /MISSING ANALYSIS.

Oneway

Test of Homogeneity of Variances

Set System

Levene Statistic	df1	df2	Sig.
.579	1	18	.457

ANOVA

Set System					
	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	45.000	1	45.000	14.336	.001
Within Groups	56.500	18	3.139		
Total	101.500	19			

Lampiran 7. UJI T (Pired Sample T test)

T-TEST PAIRS=VAR00001 WITH VAR00002 (PAIRED)
/CRITERIA=CI (.9500)
/MISSING=ANALYSIS.

T-Test

Paired Samples Statistics

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	Compund set (pretest)	28.7000	10	1.25167	.39581
	Compund set (posttest)	32.7500	10	1.11181	.35158

Paired Samples Correlations

		N	Correlation	Sig.
Pair 1	Compund set (pretest) & Compund set (posttest)	10	.619	.056

Paired Samples Test

		Paired Differences					t	df	Sig. (2-tailed)
					95% Confidence Interval of the Difference				
					Mean	Std. Deviation			
Pair 1	Compund set (pretest) - Compund set (posttest)	4.05000	1.03950	.32872	4.79361	3.30639	12.321	9	.000

T-TEST PAIRS=VAR00003 WITH VAR00004 (PAIRED)
/CRITERIA=CI (.9500)
/MISSING=ANALYSIS.

T-Test

Paired Samples Statistics

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	Set System (pretest)	28.0000	10	1.94365	.61464
	Set System (Posttest)	31.0000	10	1.58114	.50000

Paired Samples Correlations

		N	Correlation	Sig.
Pair 1	Set System (pretest) & Set System (Posttest)	10	.940	.000

Paired Samples Test

		Paired Differences					t	df	Sig. (2-tailed)
					95% Confidence Interval of the Difference				
					Mean	Std. Deviation			
Pair 1	Set System (pretest) - Set System (Posttest)	3.00000	.70711	.22361	3.50583	2.49417	13.416	9	.000

Uji t (*Independent Sample T test*)

```
T-TEST GROUPS=VAR00002(1 2)
/MISSING=ANALYSIS
/VARIABLES=VAR00001
/CRITERIA=CI(.9500) .
```

T-Test

Group Statistics					
VAR00002		N	Mean	Std. Deviation	Std. Error Mean
Pretest	compound set	10	28.7000	1.25167	.39581
	set system	10	28.0000	1.94365	.61464

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
Pretest	Equal variances assumed	2.416	.138	.958	18	.351	.70000	.73106	-.83589	2.23589
	Equal variances not assumed			.958	15.369	.353	.70000	.73106	-.85496	2.25496

```
T-TEST GROUPS=VAR00004(1 2)
/MISSING=ANALYSIS
/VARIABLES=VAR00003
/CRITERIA=CI(.9500).
```

T-Test

Group Statistics					
VAR00004		N	Mean	Std. Deviation	Std. Error Mean
Posttest	compound set	10	32.7500	1.11181	.35158
	set system	10	31.0000	1.58114	.50000

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
Posttest	Equal variances assumed	1.670	.213	2.863	18	.010	1.75000	.61124	.46584	3.03416
	Equal variances not assumed			2.863	16.152	.011	1.75000	.61124	.45522	3.04478