

:

.1

:

.

:

.

1

:

.

,

2010 :

.

.2

.1856

:

.1

.2

: (Misi) (Visi)

1

,

.

,

: 2

Building intact human

()

)" "

. (

:

" "

-

-

-

:

(2)

_____ :

						1
					() ()	2

					() ()	3
					() ()	4
					() ()	5
						6
					,	7
						8

						9
						10

(3)

	10	9	8	7	6	5	4	3	2	1		
40	4	4	4	4	4	4	4	4	4	4		1
40	4	4	4	4	4	4	4	4	4	4		2
34	4	4	3	4	4	4	4	3	4	4		3
37	4	4	4	4	3	4	4	4	4	4		4
40	4	4	4	4	4	4	4	4	4	4		5

37	4	4	3	4	4	4	4	4	4	4		6
40	4	4	4	4	4	4	4	4	4	4		7
37	4	4	4	3	4	4	4	4	4	4		8
40	4	4	4	4	4	4	4	4	4	4		9
37	4	4	4	4	4	4	4	3	4	4		10
40	4	4	4	4	4	4	4	4	4	4		11
31	4	4	4	4	3	4	3	3	4	4		12
40	4	4	4	4	4	4	4	4	4	4		13
37	4	4	3	4	4	4	4	4	4	4		14
37	4	4	4	4	4	4	3	4	4	4		15
40	4	4	4	4	4	4	4	4	4	4		16
37	4	4	4	3	4	4	4	4	4	4		17
40	4	4	4	4	4	4	4	4	4	4		18
40	4	4	4	4	4	4	4	4	4	4		19
40	4	4	4	4	4	4	4	4	4	4		20
40	4	4	4	4	4	4	4	4	4	4		21
40	4	4	4	4	4	4	4	4	4	4		22
37	4	4	3	4	4	4	4	4	4	4		23
35	4	4	4	4	3	4	4	2	4	4		24

37	4	4	4	4	4	3	4	4	4	4		25
40	4	4	4	4	4	4	4	4	4	4		26
34	4	4	4	3	4	4	4	3	4	4		27
37	4	4	3	4	4	4	4	4	4	4		28
37	4	4	4	4	4	4	4	3	4	4		29
40	4	4	4	4	4	4	4	4	4	4		30

(4) :

%	N	F		
100	30	30		1
-		-		
-		-		
-		-		
100	30	30		

(5) :

()

%	N	F		
---	---	---	--	--

100	30	30		2
-		-		
-		-		
-		-		
100	30	30		

(6) :

()
()

%	N	F		
80	30	24		3
16.6		5		
3.3		1		
-		-		
99.9	30	30		

(7) :

()

()

%	N	F		
93.3	30	28		4
6.6		2		
-		-		
-		-		
99.9	30	30		

(8)

()

%	N	F		
96.6	30	29		5
3.3		1		
-		-		
-		-		
99.9	30	30		

(9)

%	N	F		
90	30	27		6
10		3		
-		-		
-		-		
100	30	30		

(10)

%	N	F		
86.6	30	26		7
13.3		4		
-		-		
-		-		
99.9	30	30		

(11)

%	N	F		
83.3	30	25		8
16.6		5		
-		-		
-		-		
99.9	30	30		

(12)

%	N	F		
100	30	30		9
-		-		
-		-		
-		-		
100	30	30		

(13)

%	N	F		
100	30	30		10
-		-		
-		-		
-		-		
100	30	30		

:

(14)

-	-	-	100	1
-	-	-	100	2
-	3.3	16.6	80	3
-	-	6.6	93.3	4
-	-	3.3	96.6	5

-	-	10	90	6
-	-	13.3	86.6	7
-	-	16.6	83.3	8
-	-	-	100	9
-	-	-	100	10
-	3.3	66.4	929.8	
-	0.33	6.64	92.98	(mean)

% 92.98

"

"

.% 76 - % 100

% 92.98

.

"

"

() ()

.

"

"

.

.2

.

.(Post Test)

(Pre Test)

"

"

"

"

(15)

"

"

7		1
7		2
6		3
6		4
7		5
6		6
8		7
7		8
7		9

5		10
6		11
7		12
7		13
6		14
8		15
8		16
7		17
7		18
8		19
7		20
7		21
5		22

6		23
6		24
6		25
8		26
6		27
6		28
6		29
7		30
200		

(16)

"

"

8		1
8		2
7		3
7		4
8		5
8		6
7		7
8		8
8		9
7		10

8		11
8		12
8		13
8		14
9		15
9		16
8		17
8		18
9		19
8		20
8		21
7		22
7		23

7		24
8		25
9		26
8		27
8		28
7		29
9		30
237		

t (Paired "t" test)

:

$$t = (\bar{X} - \bar{Y}) \sqrt{\frac{n(n-1)}{\sum_{i=1}^n (\hat{X}_i - \hat{Y}_i)^2}}$$

:

, SPSS

."data view"

.1

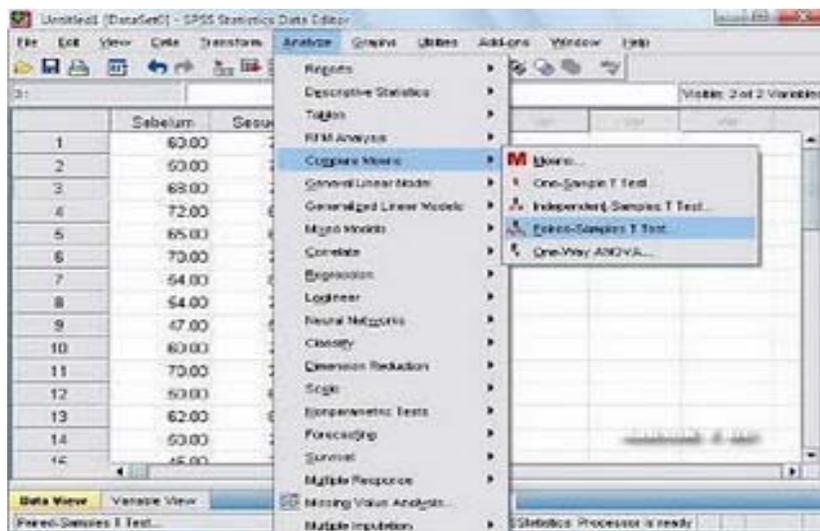
(1)

SPSS Statistics Data Editor window showing a data table with 26 rows and 2 columns: 'Sebelum' and 'Setelah'. The data values are as follows:

	Sebelum	Setelah
9	60.00	70.00
10	70.00	80.00
11	80.00	90.00
12	50.00	60.00
13	70.00	80.00
14	70.00	80.00
15	60.00	70.00
16	80.00	80.00
17	60.00	70.00
18	60.00	70.00
19	70.00	70.00
20	70.00	80.00
21	70.00	80.00
22	70.00	70.00
23	70.00	80.00
24	70.00	80.00
25	60.00	70.00
26		

“Data View”

Analyze – Compare Means – Paired Samples T test .2

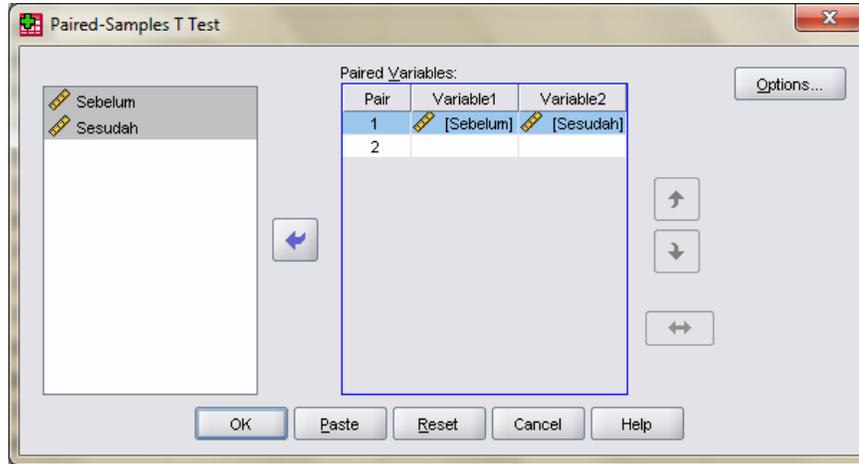


“Paired Samples T test “ (2)

Paired , Paired-T test () .3

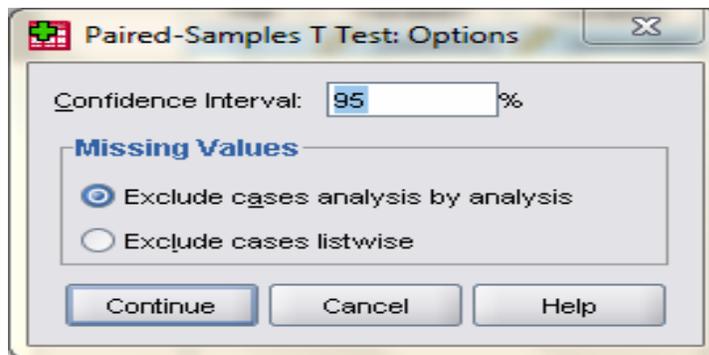
OK - continue, Variables

(3)



“Paired Variable”

(4)



“Paired Sample T test: Option “

:

(17)

Paired Samples Statistics

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	sebelum	66.6667	30	8.44182	1.54126
	sesudah	79.0000	30	6.61764	1.20821

(18)

Paired Samples Correlations

		N	Correlation	Sig.
Pair 1	sebelum & sesudah	30	.679	.000

: SPSS

: (Ho)

"

"



" : (Ha) ●
"

: Paired Samples Statistics ●

66.6667 = -

79.0000 = -

8.44182 = -

6.61764 = -

1.54126 = Standart Error -

1.20821 = Standart Error -

Paired Samples Correlations ●

. (0,679)

" "

"

"

.4

(19)

3

Paired Samples Test

	Paired Differences					t	df	Sig. (2-tailed)
	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
				Lower	Upper			
Pair 1 sebelum - sesudah	-12.33333	6.26062	1.14303	-14.67109	-9.99558	-10.790	29	.000

:

: Paired Samples Test

●

$$10.790 = (T \text{ test}) t$$

-

$$2,042 =$$

t table

-

$$0,000 =$$

Sig. (2-tailed)

-

t table	(T test) t	
	(Ho)	, (10.790 > 2.402)
0,05	Sig. (2-tailed)	. (Ha)
	(Ho)	, (0,00 < 0,05)
		. (Ha)
	"	"