VALIDITAS & RELIABILITAS

Kuesioner

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Balai Besar Pengkajian dan Pengembangan Teknologi Pertanian
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Pengertian

- **Valid ?**

  Jika butir pertanyaan kuesioner mampu mengungkapkan sesuatu yang akan diukur

- **Reliabel/Andal ?**

  Apabila jawaban seseorang terhadap pertanyaan konsisten

Pengujian Validitas

Contoh:

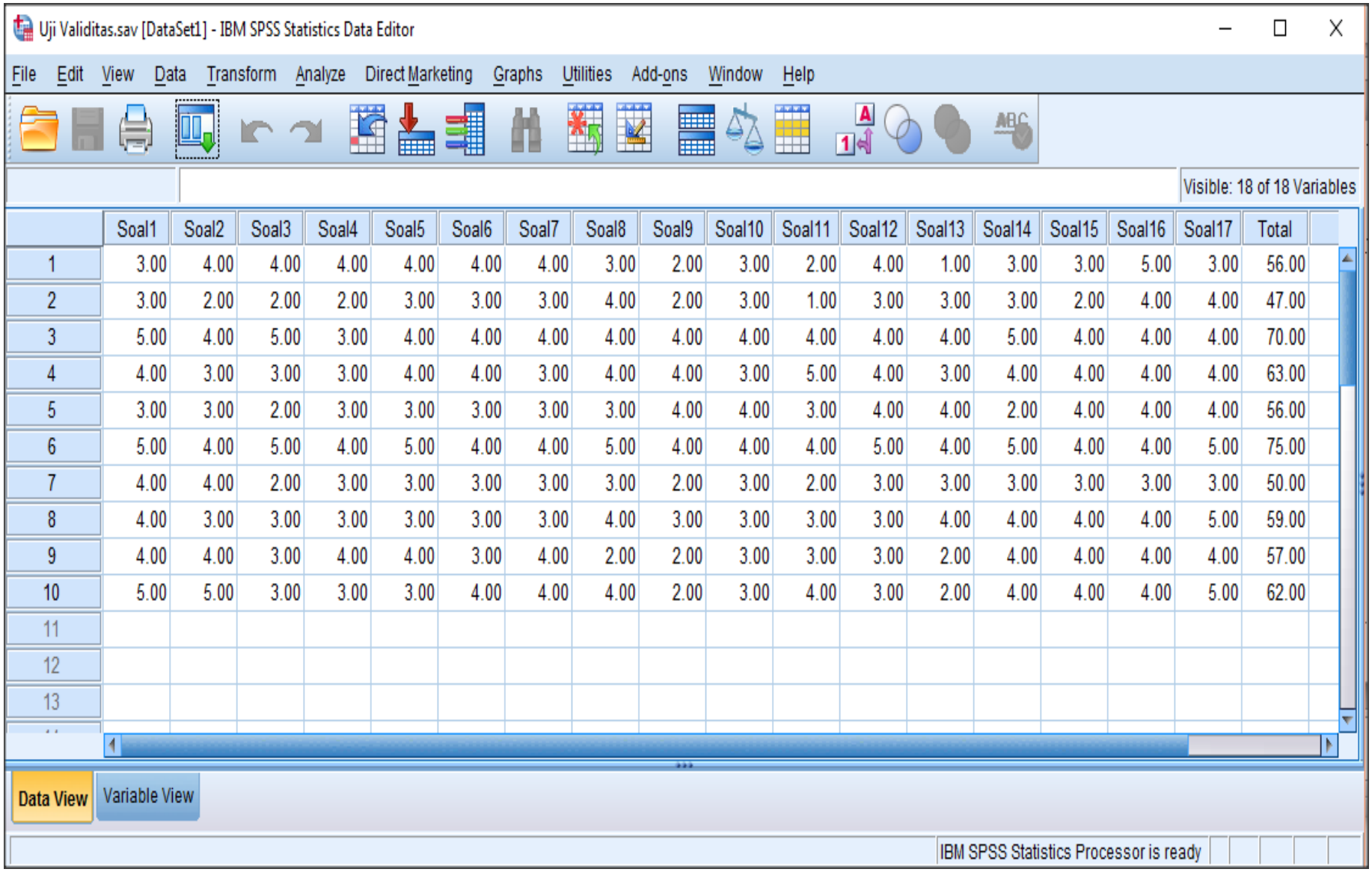
- Kuesioner mengandung 17 butir pertanyaan
- Apakah pertanyaan itu valid?

Tahapan Pengujian

- Lakukan test kuesioner kepada minimal 10 orang responden.
- Tanyakan setiap butir pertanyaan dalam kuesioner
- Berikan skor terhadap jawaban responden
  1 = Sangat Tidak Setuju
  2 = Tidak Setuju
  3 = Ragu/Netral
  4 = Setuju
  5 = Sangat Setuju

Tahapan Pengujian

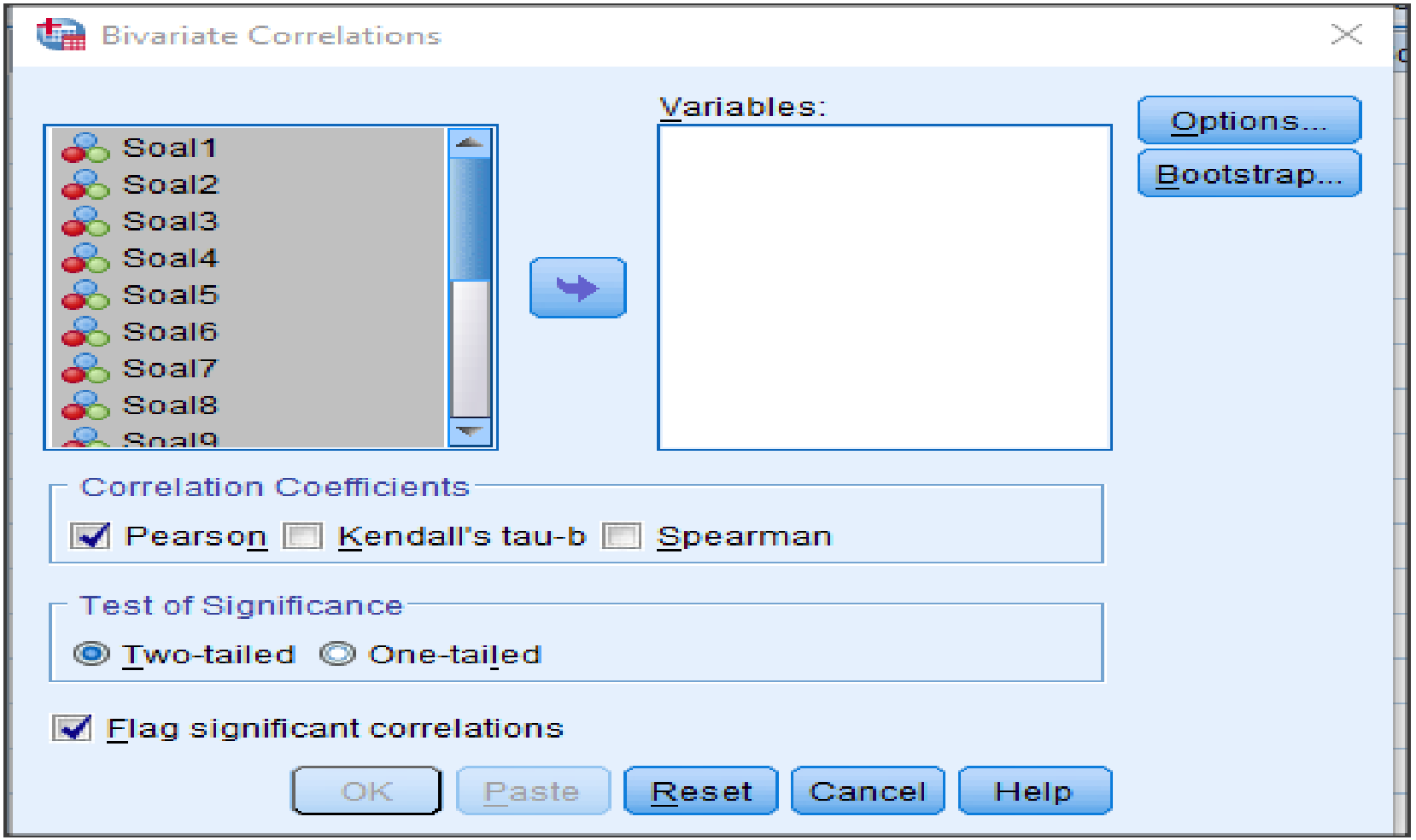
- Akumulasikan nilai skor tersebut , tuangkan di dalam Worksheet Excel atau di SPSS
- Contoh, nilai skor dari 10 orang responden, sebagai berikut:



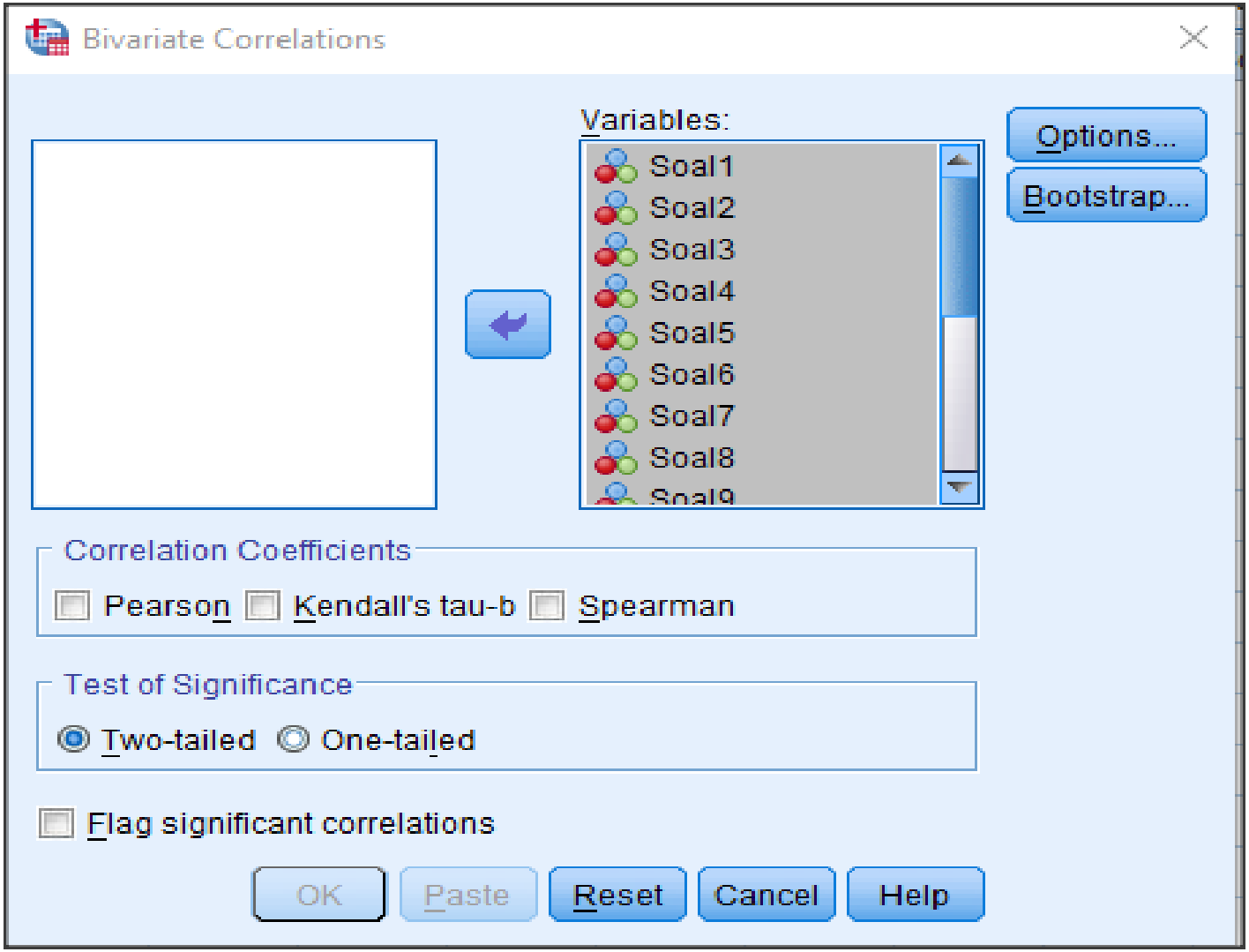
	Soal1	Soal2	Soal3	Soal4	Soal5	Soal6	Soal7	Soal8	Soal9	Soal10	Soal11	Soal12	Soal13	Soal14	Soal15	Soal16	Soal17	Total
1	3.00	4.00	4.00	4.00	4.00	4.00	4.00	3.00	2.00	3.00	2.00	4.00	1.00	3.00	3.00	5.00	3.00	56.00
2	3.00	2.00	2.00	2.00	3.00	3.00	3.00	4.00	2.00	3.00	1.00	3.00	3.00	3.00	2.00	4.00	4.00	47.00
3	5.00	4.00	5.00	3.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	5.00	4.00	4.00	4.00	70.00
4	4.00	3.00	3.00	3.00	4.00	4.00	3.00	4.00	4.00	3.00	5.00	4.00	3.00	4.00	4.00	4.00	4.00	63.00
5	3.00	3.00	2.00	3.00	3.00	3.00	3.00	3.00	4.00	4.00	3.00	4.00	4.00	2.00	4.00	4.00	4.00	56.00
6	5.00	4.00	5.00	4.00	5.00	4.00	4.00	5.00	4.00	4.00	4.00	5.00	4.00	5.00	4.00	4.00	5.00	75.00
7	4.00	4.00	2.00	3.00	3.00	3.00	3.00	3.00	2.00	3.00	2.00	3.00	3.00	3.00	3.00	3.00	3.00	50.00
8	4.00	3.00	3.00	3.00	3.00	3.00	3.00	4.00	3.00	3.00	3.00	3.00	4.00	4.00	4.00	4.00	5.00	59.00
9	4.00	4.00	3.00	4.00	4.00	3.00	4.00	2.00	2.00	3.00	3.00	3.00	2.00	4.00	4.00	4.00	4.00	57.00
10	5.00	5.00	3.00	3.00	3.00	4.00	4.00	4.00	2.00	3.00	4.00	3.00	2.00	4.00	4.00	4.00	5.00	62.00
11																		
12																		
13																		

Klik Analyze, kemudian Correlate, Bivariate

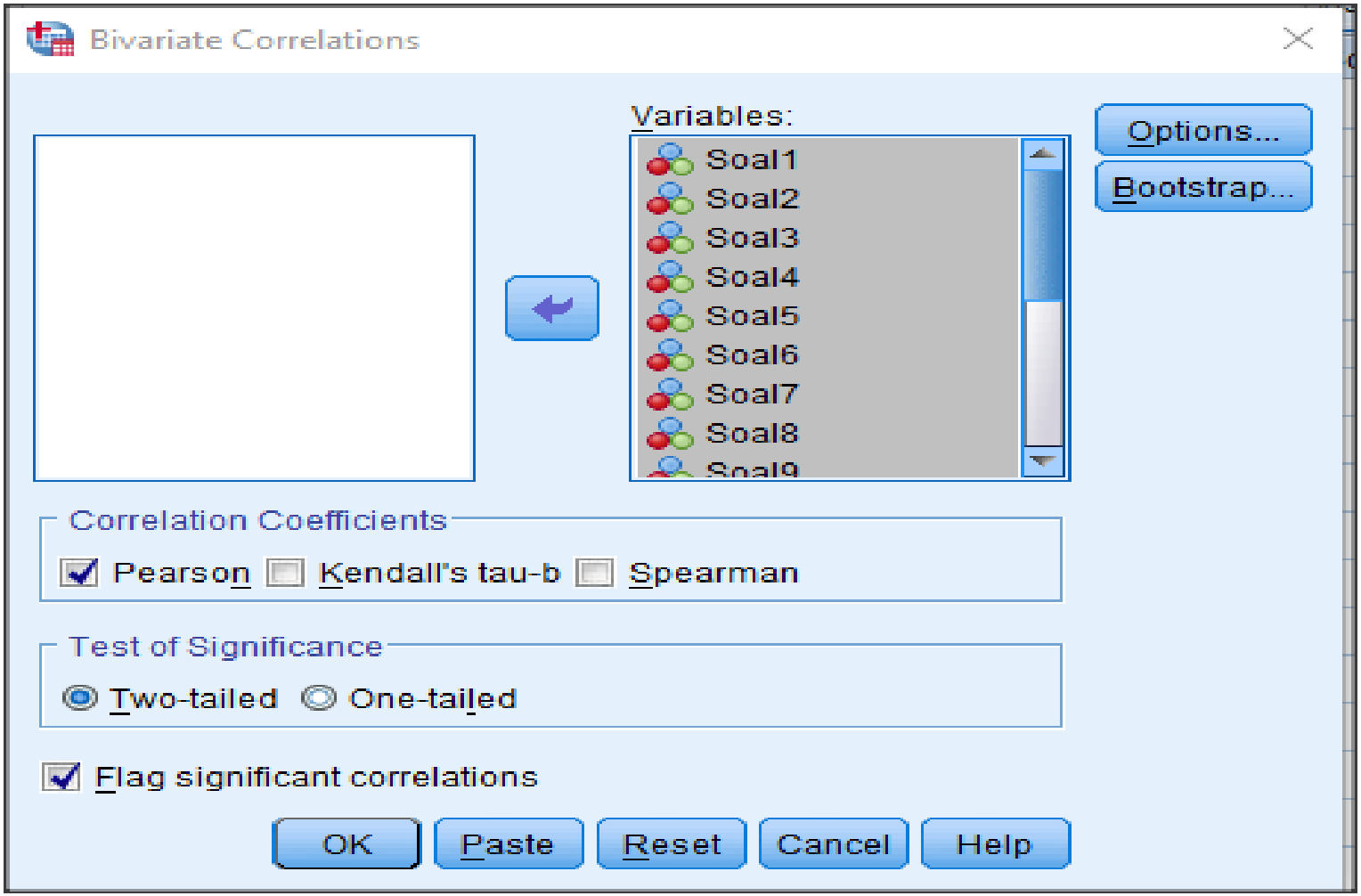
Sehingga muncul kotak dialog seperti ini



Pindahkan semuan item di kolom sebelah kiri ke kolom sebelah kanan, hasilnya seperti ini.



Silahkan centang kotak kecil di belakang *Pearson*, dan dibelakang *Flag Significant Correlaltions, Klik OK*



Correlations

		Soal1	Soal2	Soal3	Soal4	Soal5	Soal6	Soal7	Soal8	Soal9	Soal10	Soal11	Soal12	Soal13	Soal14	Soal15	Soal16	Soal17	Total
Soal1	Pearson Correlation	1	.645*	.599	.215	.389	.516	.516	.484	.274	.282	.682*	.195	.258	.861**	.584	-.289	.553	.771**
	Sig. (2-tailed)		.044	.067	.551	.266	.126	.126	.156	.444	.430	.030	.590	.471	.001	.076	.419	.097	.009
	N	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
Soal2	Pearson Correlation	.645*	1	.441	.583	.264	.500	.750*	-.094	-.185	.055	.374	.075	-.375	.389	.452	.000	.071	.435
	Sig. (2-tailed)	.044		.202	.077	.461	.141	.012	.797	.608	.881	.287	.836	.286	.267	.189	1.000	.845	.209
	N	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
Soal3	Pearson Correlation	.599	.441	1	.557	.812**	.743*	.743*	.441	.413	.486	.474	.672*	.093	.784**	.392	.415	.239	.855**
	Sig. (2-tailed)	.067	.202		.094	.004	.014	.014	.202	.235	.154	.166	.033	.799	.007	.263	.233	.506	.002
	N	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
Soal4	Pearson Correlation	.215	.583	.557	1	.704*	.333	.667*	-.250	.035	.145	.264	.452	-.333	.296	.452	.373	-.048	.456
	Sig. (2-tailed)	.551	.077	.094		.023	.347	.035	.486	.923	.688	.461	.189	.347	.406	.189	.289	.896	.185
	N	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
Soal5	Pearson Correlation	.389	.264	.812**	.704*	1	.603	.603	.264	.415	.395	.451	.773**	.000	.637*	.318	.337	.086	.731**
	Sig. (2-tailed)	.266	.461	.004	.023		.065	.065	.461	.232	.259	.190	.009	1.000	.048	.370	.341	.813	.016
	N	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
Soal6	Pearson Correlation	.516	.500	.743*	.333	.603	1	.600	.500	.318	.218	.616	.603	-.200	.556	.302	.447	.143	.709*
	Sig. (2-tailed)	.126	.141	.014	.347	.065		.067	.141	.371	.545	.058	.065	.580	.095	.397	.195	.694	.022
	N	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
Soal7	Pearson Correlation	.516	.750*	.743*	.667*	.603	.600	1	.000	-.106	.218	.264	.302	-.400	.556	.302	.447	.143	.560
	Sig. (2-tailed)	.126	.012	.014	.035	.065	.067		1.000	.771	.545	.461	.397	.252	.095	.397	.195	.694	.093
	N	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
Soal8	Pearson Correlation	.484	-.094	.441	-.250	.264	.500	.000	1	.477	.327	.374	.452	.500	.528	.075	.000	.607	.575
	Sig. (2-tailed)	.156	.797	.202	.486	.461	.141	1.000		.163	.356	.287	.189	.141	.117	.836	1.000	.063	.082
	N	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
Soal9	Pearson Correlation	.274	-.185	.413	.035	.415	.318	-.106	.477	1	.763*	.663*	.735*	.742*	.318	.575	.000	.318	.679*
	Sig. (2-tailed)	.444	.608	.235	.923	.232	.371	.771	.163		.010	.037	.015	.014	.371	.082	1.000	.371	.031
	N	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
Soal10	Pearson Correlation	.282	.055	.486	.145	.395	.218	.218	.327	.763*	1	.327	.724*	.655*	.218	.395	.000	.218	.611
	Sig. (2-tailed)	.430	.881	.154	.688	.259	.545	.545	.356	.010		.357	.018	.040	.545	.259	1.000	.545	.061
	N	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
Soal11	Pearson Correlation	.682*	.374	.474	.264	.451	.616	.264	.374	.663*	.327	1	.451	.264	.616	.849**	.000	.491	.805**
	Sig. (2-tailed)	.030	.287	.166	.461	.190	.058	.461	.287	.037	.357		.190	.461	.058	.002	1.000	.150	.005
	N	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
Soal12	Pearson Correlation	.195	.075	.672*	.452	.773**	.603	.302	.452	.735*	.724*	.451	1	.302	.302	.318	.337	.086	.712*
	Sig. (2-tailed)	.590	.836	.033	.189	.009	.065	.397	.189	.015	.018	.190		.397	.397	.370	.341	.813	.021
	N	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
Soal13	Pearson Correlation	.258	-.375	.093	-.333	.000	-.200	-.400	.500	.742*	.655*	.264	.302	1	.222	.302	-.447	.429	.361
	Sig. (2-tailed)	.471	.286	.799	.347	1.000	.580	.252	.141	.014	.040	.461	.397		.537	.397	.195	.217	.306
	N	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
Soal14	Pearson Correlation	.861**	.389	.784**	.296	.637*	.556	.556	.528	.318	.218	.616	.302	.222	1	.469	.000	.524	.808**
	Sig. (2-tailed)	.001	.267	.007	.406	.048	.095	.095	.117	.371	.545	.058	.397	.537		.171	1.000	.120	.005
	N	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
Soal15	Pearson Correlation	.584	.452	.392	.452	.318	.302	.302	.075	.575	.395	.849**	.318	.302	.469	1	.000	.517	.712*
	Sig. (2-tailed)	.076	.189	.263	.189	.370	.397	.397	.836	.082	.259	.002	.370	.397	.171		1.000	.126	.021
	N	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
Soal16	Pearson Correlation	-.289	.000	.415	.373	.337	.447	.447	.000	.000	.000	.000	.337	-.447	.000	.000	1	.000	.167
	Sig. (2-tailed)	.419	1.000	.233	.289	.341	.195	.195	1.000	1.000	1.000	1.000	.341	.195	1.000	1.000		1.000	.645
	N	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
Soal17	Pearson Correlation	.553	.071	.239	-.048	.086	.143	.143	.607	.318	.218	.491	.086	.429	.524	.517	.000	1	.542
	Sig. (2-tailed)	.097	.845	.506	.896	.813	.694	.694	.063	.371	.545	.150	.813	.217	.120	.126	1.000		.106
	N	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
Total	Pearson Correlation	.771**	.435	.855**	.456	.731*	.709*	.560	.575	.679*	.611	.805**	.712*	.361	.808**	.712*	.167	.542	1
	Sig. (2-tailed)	.009	.209	.002	.185	.016	.022	.093	.082	.031	.061	.005	.021	.306	.005	.021	.645	.106	
	N	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10

*. Correlation is significant at the 0.05 level (2-tailed).; **. Correlation is significant at the 0.01 level (2-tailed).

Hasilnya

- Lihat nilai korelasi di kolom paling kanan
- Angka dengan superscript bintang satu (*) menunjukkan significant pada taraf Alpha 0,05. Jika superscript bintang dua (**) menunjukkan significant pada taraf Alpha 0,01
- Item pertanyaan dengan korelasi yang ada bintangnya menunjukkan bahwa butir pertanyaan itu valid.

Pengujian Reliabilitas

- Cara I:
  - ***Repeated measure*** **atau pengukuran ulang**

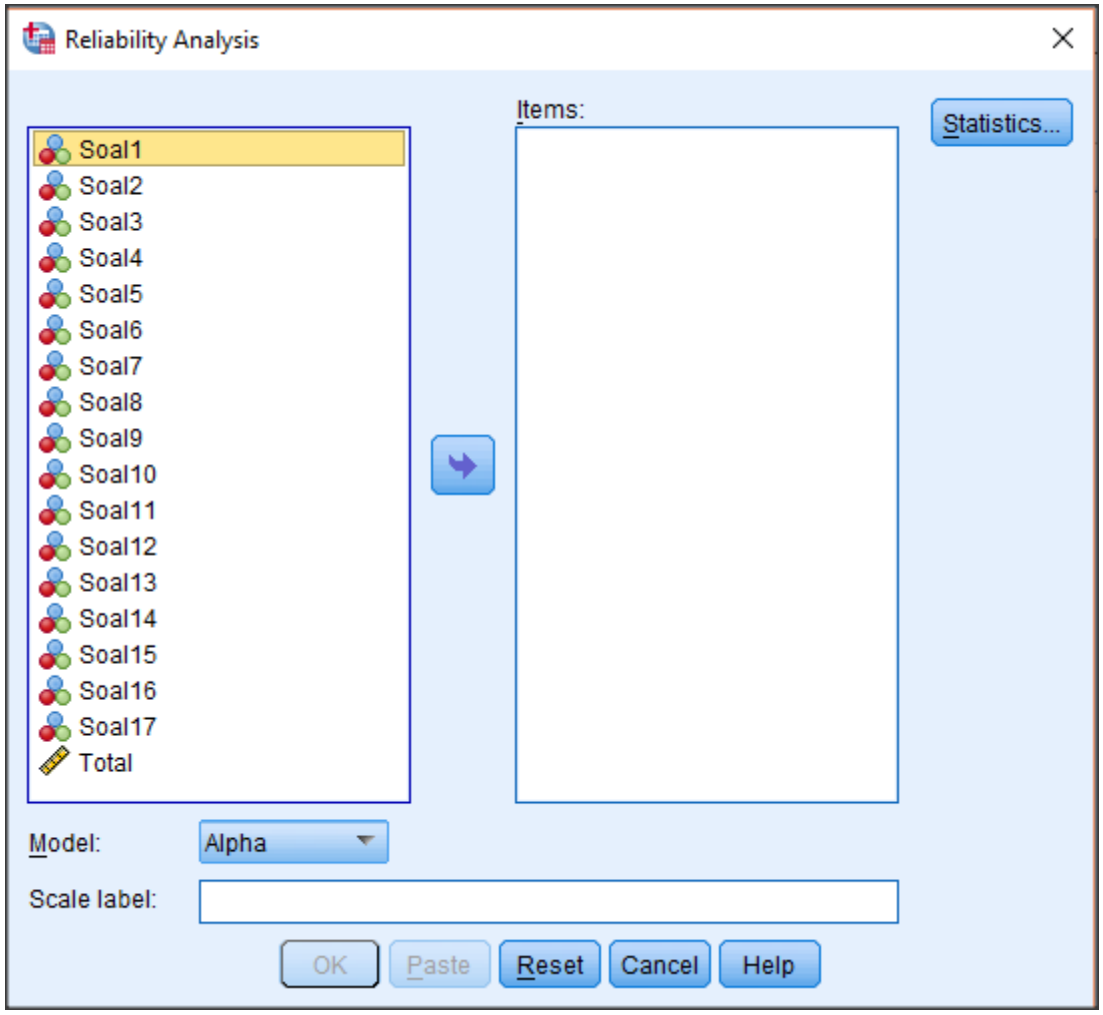
  = Dalam waktu yang berbeda, responden diberi butir pertanyaan dan alternatif jawaban yang sama. Butir pertanyaan dikatakan andal jika jawabannya sama.

❑Cara II: *One shot* atau pengukuran sekali saja

- Test kuesioner pada 10 orang (*boleh lebih*), berikan skor: 1 – 5 seperti pengujian Validitas
- Masukkan di worksheet SPSS
- Hasil skor diukur dengan bantuan SPSS, dengan fasilitas **Cronbach Alpha**
- Suatu variabel dikatakan reliabel jika memberikan nilai **Cronbach Alpha > 0,60.**

Tahapan Pengujiann

1. Pilih menu analyze, pilih submenu scale, reliability analysis
2. Masukkan skor pernyataan tiap item kedalam kolom, kemudian pilih Alpha.
3. Klik statistic, dan tampil windows reliability analysis statistic.
4. Bagian descriptive for pilih item, *scale*
5. Kemudian klik continue.
6. Klik OK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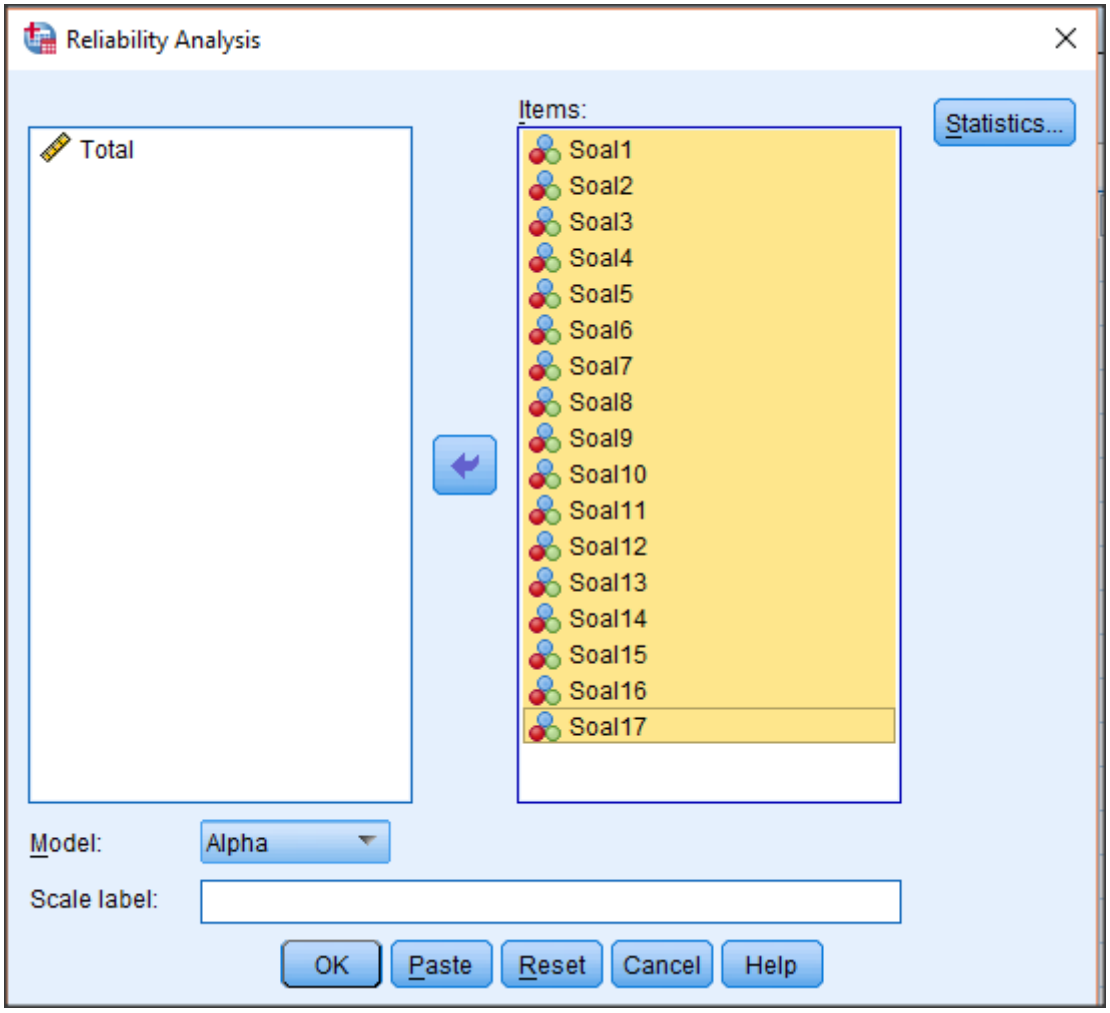
Soal1
Soal2
Soal3
Soal4
Soal5
Soal6
Soal7
Soal8
Soal9
Soal10
Soal11
Soal12
Soal13
Soal14
Soal15
Soal16
Soal17
Total
Model:
Alpha
Scale label:
OK
Paste
Reset
Cancel
Help


Reliability Analysis
Total
Items:
Soal1
Soal2
Soal3
Soal4
Soal5
Soal6
Soal7
Soal8
Soal9
Soal10
Soal11
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Soal14
Soal15
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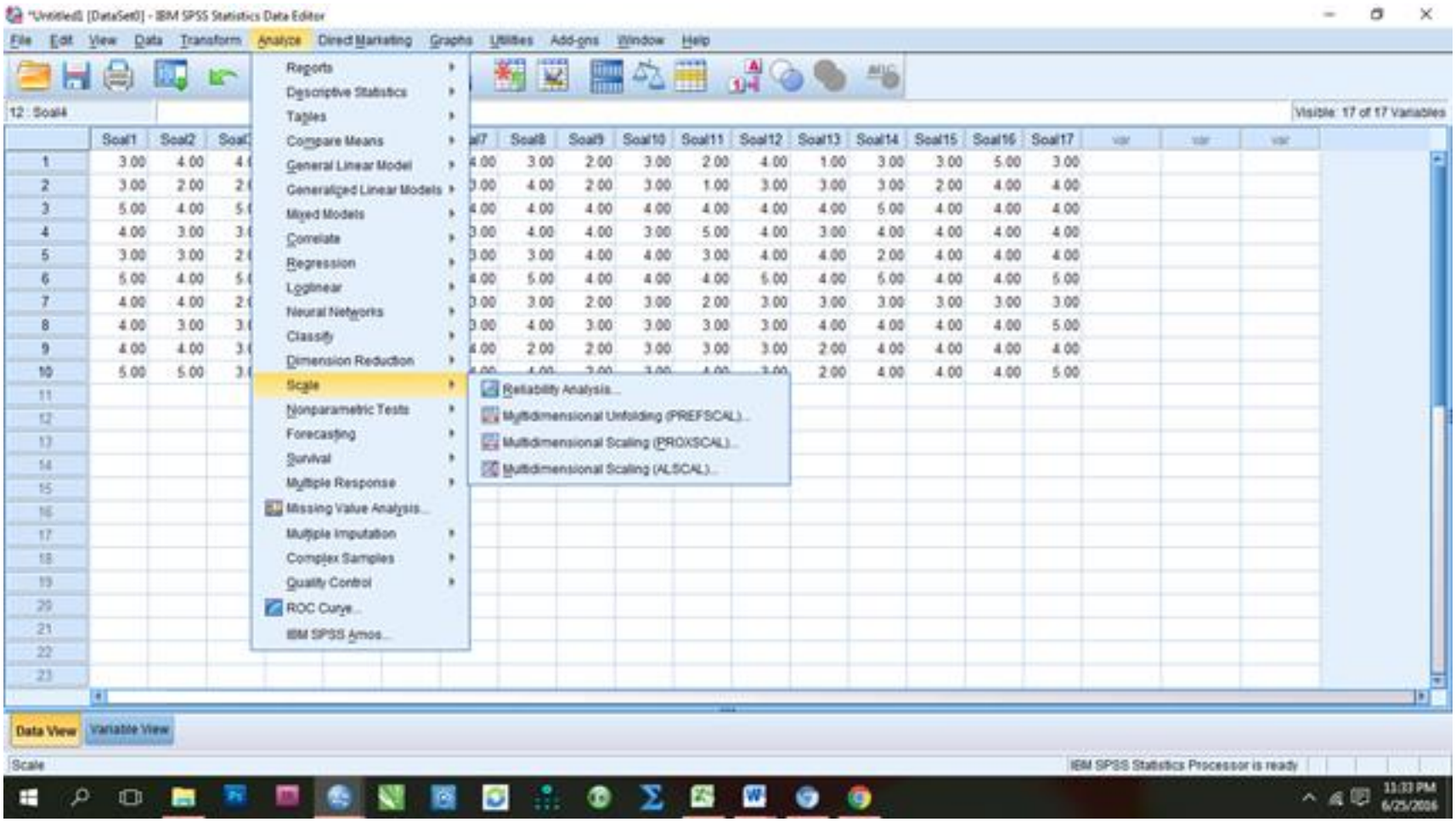
Statistics...
Model:
Alpha
Scale label:
OK
Paste
Reset
Cancel
Help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File Edit View Data Transform Analyze Direct Marketing Graphs Utilities Add-ons Window Help
Reports
Descriptive Statistics
Tables
Compare Means
General Linear Model
Generalized Linear Models
Mixed Models
Correlate
Regression
Loglinear
Neural Networks
Classify
Dimension Reduction
Scale
Nonparametric Tests
Forecasting
Survival
Multiple Response
Missing Value Analysis...
Multiple Imputation
Complex Samples
Quality Control
ROC Curve...
IBM SPSS Amos...
Reliability Analysis...
Multidimensional Unfolding (PREFSCAL)...
Multidimensional Scaling (PROXSCAL)...
Multidimensional Scaling (ALSCAL)...
Visible: 17 of 17 Variables
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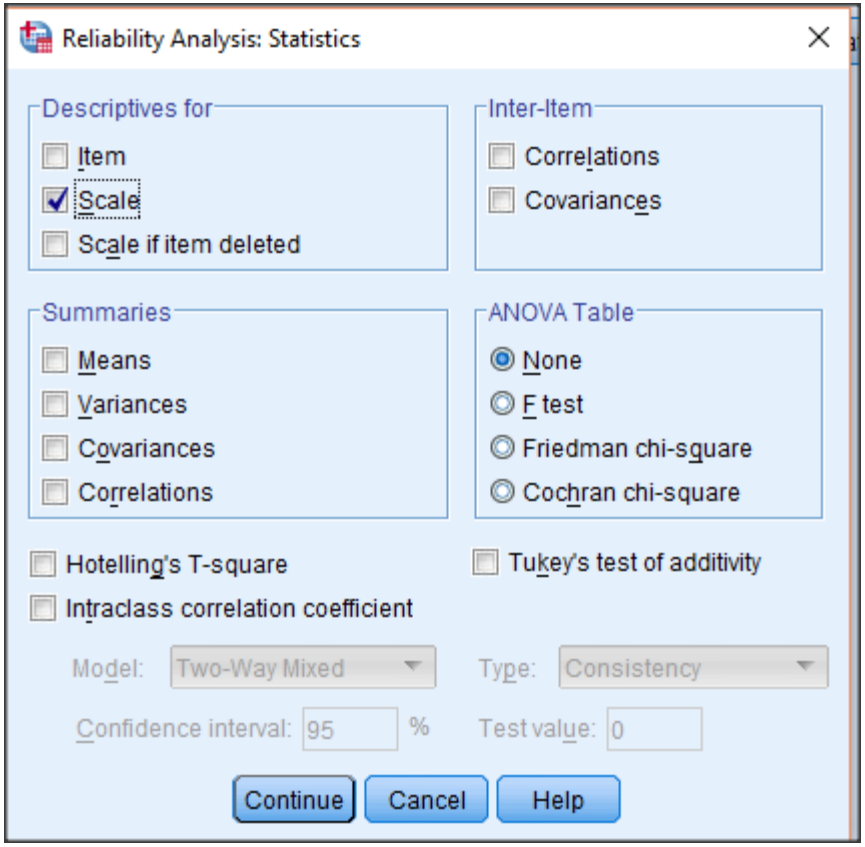
Data View
Variable View
Scale
IBM SPSS Statistics Processor is ready


Reliability Analysis: Statistics
Descriptives for
Item
Scale
Scale if item deleted
Inter-Item
Correlations
Covariances
Summaries
Means
Variances
Covariances
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None
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Friedman chi-square
Cochran chi-square
Hotelling's T-square
Tukey's test of additivity
Intraclass correlation coefficient
Model:
Two-Way Mixed
Type:
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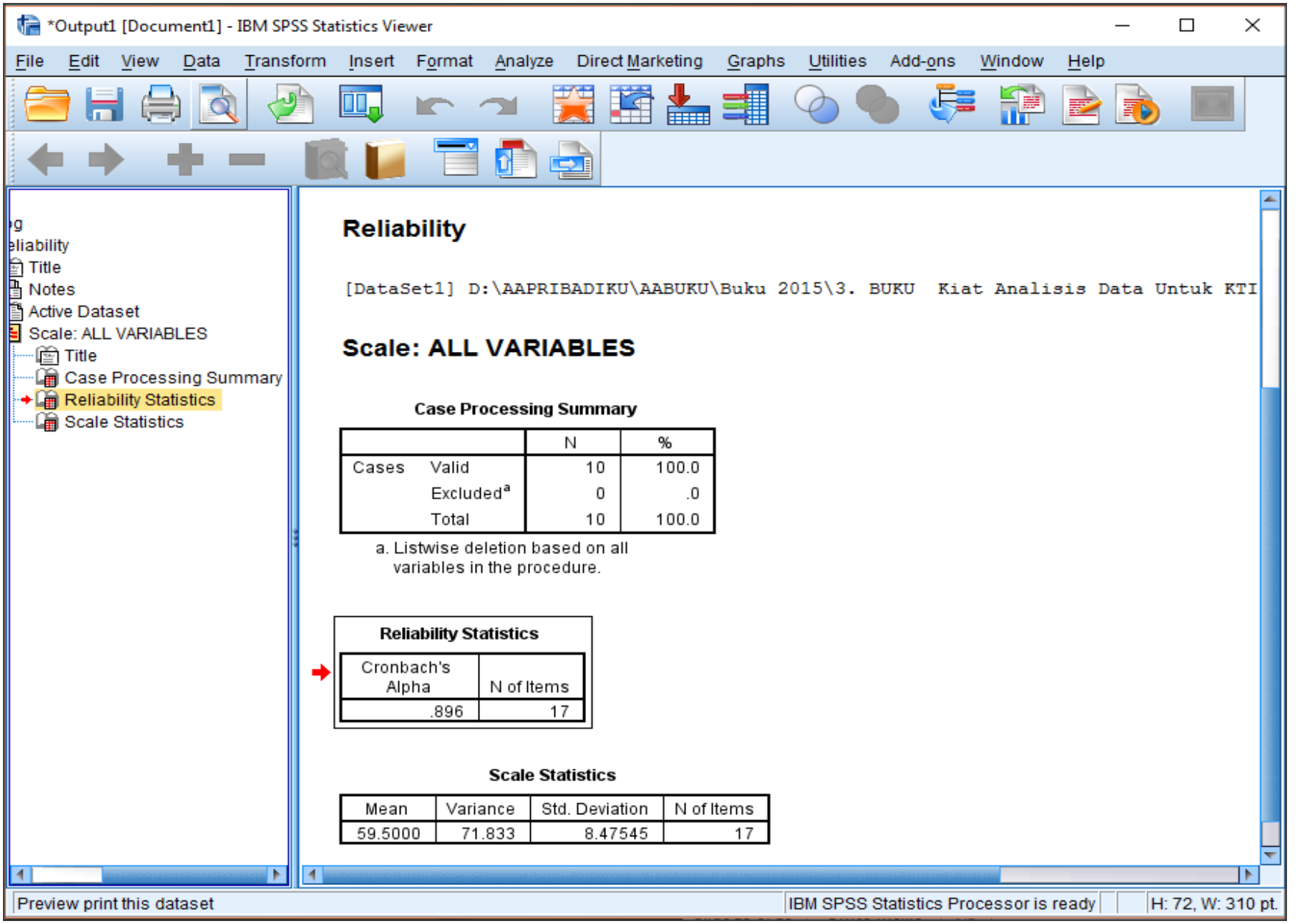
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File Edit View Data Transform Insert Format Analyze Direct Marketing Graphs Utilities Add-ons Window Help
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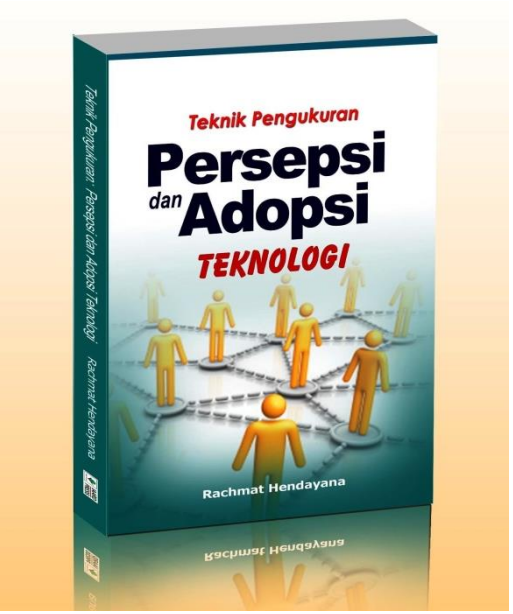
eliability
Title
Notes
Active Dataset
Scale: ALL VARIABLES
Title
Case Processing Summary
Reliability Statistics
Scale Statistics
Reliability
[DataSet1] D:\AAPRIBADIKU\AABUKU\Buku 2015\3. BUKU Kiat Analisis Data Untuk KTI
Scale: ALL VARIABLES
Case Processing Summary
N %
Cases Valid 10 100.0
Excluded[a] 0 .0
Total 10 100.0
a. Listwise deletion based on all variables in the procedure.
Reliability Statistics
Cronbach's Alpha N of Items
.896 17
Scale Statistics
Mean Variance Std. Deviation N of Items
59.5000 71.833 8.47545 17
Preview print this dataset
IBM SPSS Statistics Processor is ready
H: 72, W: 310 pt.

Hasil Pengujian

- Lihat kolom Cronbach Alpha
- Nilainya 0,896 > 0,6
- Maka kuesioner reliabel



Terima kasih