

## SPSS Reliability Example

### Menus

To obtain descriptive statistics, such as mean, variance, skew, and kurtosis.

**Analyze** → **Descriptive Statistics** → **Descriptives**

Click the Options button, and check “Variance” under **Dispersion** and “Kurtosis and Skewness” under **Distribution**. Drag over the desired variables

To obtain frequency histograms

**Analyze** → **Descriptive Statistics** → **Frequencies**

Drag over the desired variables. Click the **Charts** button, and then check “Histograms” and “Show normal curve on histogram”

To obtain Cronbach’s alpha and item statistics

**Analyze** → **Scale** → **Reliability Analysis**

Drag over the desired variables. Click the **Statistics** button and check “Item,” “Scale,” and “Scale-if-item-deleted” under **Descriptives**; check “Correlations” under **Inter-Item**, and “Means and Correlations” under **Summaries**

### Syntax

\*Example of Cronbach's alpha.

~~get file='c:\jason\spsswin\nege\wave1\wave1.sav'.~~

~~\*Get file retrieves data file, but can open with windows~~

~~\* This location is default location of downloads on lab computers~~

~~get FILE='C:\Users\newsomj\Downloads\ias.sav'.~~

~~\*use EXECUTE. \*afterward or a statistical procedure to execute get file command.~~

~~\*I did not need a recode, so the following example is commented out.~~

~~\* recode q4 q5 q10 (1=7) (2=6) (3=5) (4=4) (5=3) (6=2) (7=1) into q4r q5r q10r.~~

```
frequencies vars= wlunw1 wlunw2 wlunw3 wldwn1 wldwn2 wldwn3 wlout1  
wlout2 wlout3 wlfai1 wlfai2 wlfai3  
/histogram=normal.
```

```
descriptives vars=wlunw1 wlunw2 wlunw3 wldwn1 wldwn2 wldwn3 wlout1  
wlout2 wlout3 wlfai1 wlfai2 wlfai3  
/statistics=default variance skew kurtosis.
```

```
reliability variables=wlunw1 wlunw2 wlunw3 wldwn1 wldwn2 wldwn3 wlout1  
wlout2 wlout3 wlfai1 wlfai2 wlfai3  
/scale(nse)=wlunw1 to wlfai3  
/statistics=correlations scale  
/summary=means corr total.
```

### Output

**Descriptive Statistics**

	N	Minimum	Maximum	Mean	Std. Deviation	Variance	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
w1unw1 unwanted advice	916	-7.00	7.00	.7609	1.40438	1.972	1.647	.081	8.936	.161
w1unw2 question your decisions	916	-7.00	7.00	.7325	1.51260	2.288	.672	.081	10.084	.161
w1unw3 interfere in personal matters	916	-7.00	7.00	.4465	1.37439	1.889	1.652	.081	14.479	.161
w1dwn1 let you down	916	-7.00	7.00	.5273	1.42050	2.018	2.883	.081	12.723	.161
w1dwn2 ask for too much help	916	-7.00	7.00	.5491	1.44131	2.077	2.067	.081	11.437	.161
w1dwn3 fail to give assistance	916	-7.00	7.00	.5120	1.52031	2.311	2.202	.081	12.052	.161
w1out1 leave you out	916	-7.00	7.00	.4159	1.34226	1.802	2.505	.081	16.100	.161
w1out2 forget/ignore you	916	-7.00	7.00	.4225	1.40394	1.971	1.888	.081	14.679	.161
w1out3 fail spend enough time w/ you	916	-7.00	7.00	.5131	1.42838	2.040	1.522	.081	12.302	.161
w1fai1 do thoughtless things	916	-7.00	7.00	.5590	1.39390	1.943	2.065	.081	12.742	.161
w1fai2 act angry or upset with you	916	-7.00	7.00	.5590	1.45753	2.124	1.588	.081	12.139	.161
w1fai3 act unsympathetic or critical	916	-7.00	7.00	.5502	1.42449	2.029	2.475	.081	12.356	.161
Valid N (listwise)	916									

**Frequencies**

**Frequency Table**

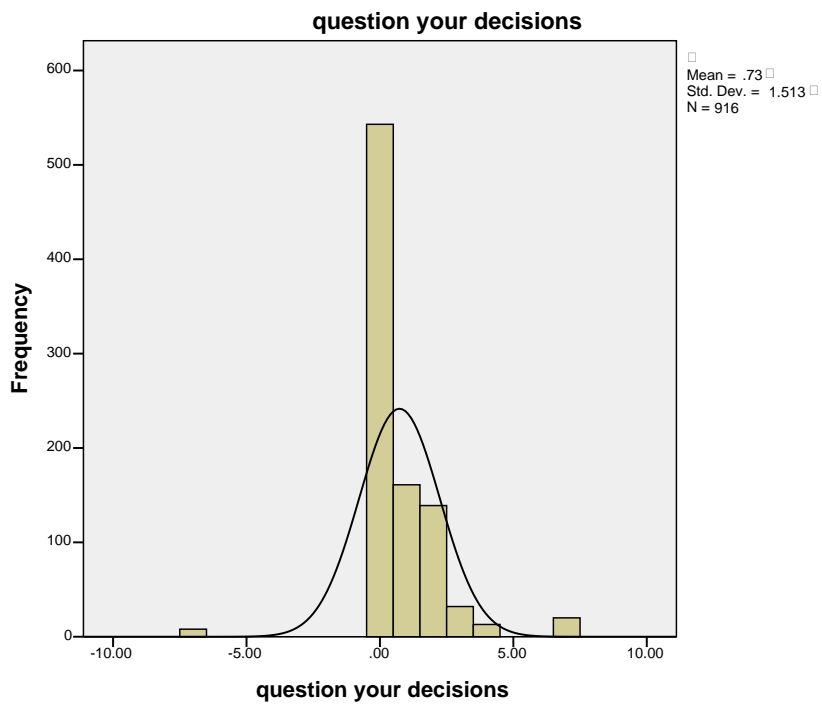
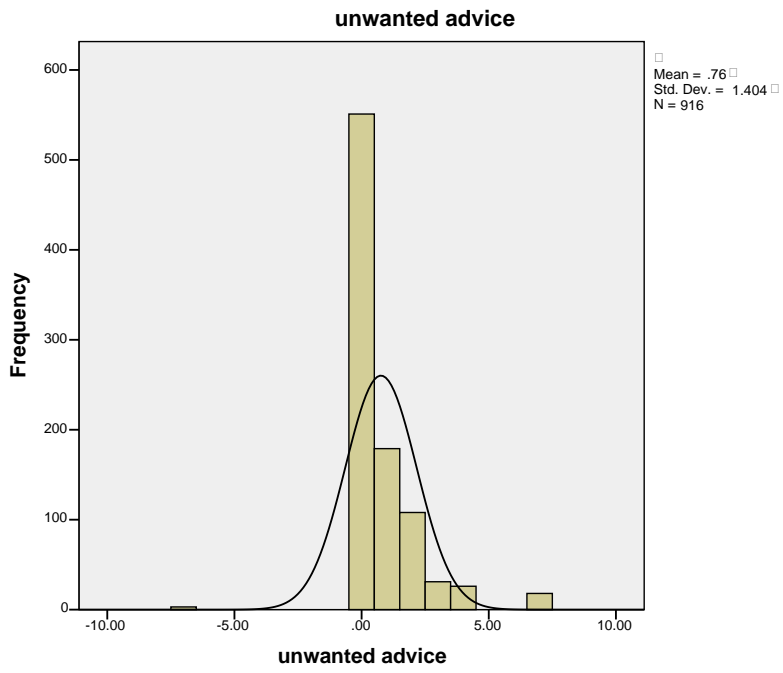
**w1unw1 unwanted advice**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid -7.00	3	.3	.3	.3
.00	551	60.2	60.2	60.5
1.00	179	19.5	19.5	80.0
2.00	108	11.8	11.8	91.8
3.00	31	3.4	3.4	95.2
4.00	26	2.8	2.8	98.0
7.00	18	2.0	2.0	100.0
Total	916	100.0	100.0	

**w1unw2 question your decisions**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid -7.00	8	.9	.9	.9
.00	543	59.3	59.3	60.2
1.00	161	17.6	17.6	77.7
2.00	139	15.2	15.2	92.9
3.00	32	3.5	3.5	96.4
4.00	13	1.4	1.4	97.8
7.00	20	2.2	2.2	100.0
Total	916	100.0	100.0	

## Histogram



## Reliability

**Reliability Statistics**

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.940	.940	12

**Inter-Item Correlation Matrix**

	w1unw1 unwanted advice	w1unw2 question your decisions	w1unw3 interfere in personal matters	w1dwn1 let you down	w1dwn2 ask for too much help	w1dwn3 fail to give assistance	w1out1 leave you out	w1out2 forget/ignore you	w1out3 fail spend enough time w/ you	w1fai1 do thoughtless things	w1fai2 act angry or upset with you	w1fai3 act unsympathetic or critical
w1unw1 unwanted advice	1.000	.760	.690	.554	.528	.437	.527	.492	.437	.504	.496	.466
w1unw2 question your decisions	.760	1.000	.812	.549	.591	.502	.503	.530	.482	.476	.531	.513
w1unw3 interfere in personal matters	.690	.812	1.000	.538	.567	.531	.466	.506	.498	.469	.515	.547
w1dwn1 let you down	.554	.549	.538	1.000	.757	.799	.555	.565	.479	.547	.527	.538
w1dwn2 ask for too much help	.528	.591	.567	.757	1.000	.709	.555	.590	.506	.520	.551	.549
w1dwn3 fail to give assistance	.437	.502	.531	.799	.709	1.000	.429	.480	.444	.435	.497	.545
w1out1 leave you out	.527	.503	.466	.555	.555	.429	1.000	.837	.782	.640	.551	.536
w1out2 forget/ignore you	.492	.530	.506	.565	.590	.480	.837	1.000	.825	.625	.560	.577
w1out3 fail spend enough time w/ you	.437	.482	.498	.479	.506	.444	.782	.825	1.000	.570	.501	.536
w1fai1 do thoughtless things	.504	.476	.469	.547	.520	.435	.640	.625	.570	1.000	.720	.693
w1fai2 act angry or upset with you	.496	.531	.515	.527	.551	.497	.551	.560	.501	.720	1.000	.820
w1fai3 act unsympathetic or critical	.466	.513	.547	.538	.549	.545	.536	.577	.536	.693	.820	1.000

**Summary Item Statistics**

	Mean	Minimum	Maximum	Range	Maximum / Minimum	Variance	N of Items
Item Means	.546	.416	.761	.345	1.829	.011	12
Inter-Item Correlations	.566	.429	.837	.407	1.949	.011	12

**Item-Total Statistics**

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
w1unw1 unwanted advice	5.7871	150.887	.686	.642	.936
w1unw2 question your decisions	5.8155	147.438	.729	.750	.935
w1unw3 interfere in personal matters	6.1015	150.386	.719	.707	.935
w1dwn1 let you down	6.0207	148.431	.753	.752	.934
w1dwn2 ask for too much help	5.9989	147.984	.754	.662	.934
w1dwn3 fail to give assistance	6.0360	149.112	.676	.700	.937
w1out1 leave you out	6.1321	150.191	.745	.762	.934
w1out2 forget/ignore you	6.1255	148.197	.771	.794	.933
w1out3 fail spend enough time w/ you	6.0349	149.870	.703	.726	.935
w1fai1 do thoughtless things	5.9891	149.906	.723	.638	.935
w1fai2 act angry or upset with you	5.9891	148.385	.732	.729	.934
w1fai3 act unsympathetic or critical	5.9978	148.780	.740	.728	.934