

**Effect of Inter-Item r and Number of Items on Reliability**

\*Inter-Item r = .20.  
CORR v1 v2 /MISS = LIST.

Correlations

	v1
v2	.196

SAMPLE 48 FROM 20000.  
RELIAB /VARI = v1 TO v2.

Cronbach's Alpha	N of Items
.326	2

RELIAB /VARI = v1 TO v4.

Cronbach's Alpha	N of Items
.425	4

RELIAB /VARI = v1 TO v8.

Cronbach's Alpha	N of Items
.693	8

RELIAB /VARI = v1 TO v16.

Cronbach's Alpha	N of Items
.767	16

\*Inter-Item r = .30.  
CORR v1 v2 /MISS = LIST.

	v1
v2	.296
	.000

SAMPLE 48 FROM 20000.  
RELIAB /VARI = v1 TO v2.

Cronbach's Alpha	N of Items
.468	2

RELIAB /VARI = v1 TO v4.

Cronbach's Alpha	N of Items
.580	4

RELIAB /VARI = v1 TO v8.

Cronbach's Alpha	N of Items
.785	8

RELIAB /VARI = v1 TO v16.

Cronbach's Alpha	N of Items
.850	16

\*Inter-Item r = .60.  
CORR v1 v2 /MISS = LIST.

	v1
v2	.597
	.000

SAMPLE 96 FROM 20000.  
RELIAB /VARI = v1 TO v2.

Cronbach's Alpha	N of Items
.769	2

RELIAB /VARI = v1 TO v4.

Cronbach's Alpha	N of Items
.865	4

RELIAB /VARI = v1 TO v8.

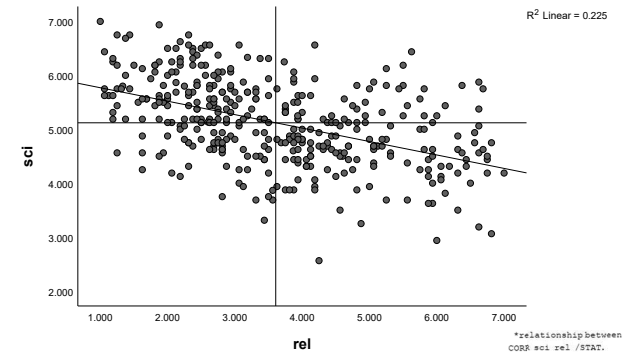
Cronbach's Alpha	N of Items
.927	8

RELIAB /VARI = v1 TO v16.

Cronbach's Alpha	N of Items
.958	16

**Unit 1 Analyses on Religion & Science Survey Data**

GRAPH /SCATTERPLOT(BIVAR)=rel WITH sci.



\*relationship between sci and rel.  
CORR sci rel /STAT.

	Mean	Std. Deviation	N
sci	5.12012	.775888	381
rel	3.69728	1.475327	381

REGRESS /DEP = sci /ENTER rel /SAVE PRED(prds.x) RESI(ress.x).

Model	R	R Square
1	.474	.225

Correlations			
	sci	rel	
sci			
rel	.474		
	.000	.000	
	.381	.381	

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	51.469	1	51.469	110.101	.000
	Residual	177.173	379	.467		
Total		228.643	380			

Model		Unstandardized Coefficients		Standardized Coefficients		t	Sig.
		B	Std. Error	Beta			
1	(Constant)	6.020	.093			64.985	.000
	rel	-.249	.024	-.474		-10.493	.000

*Residuals Statistics*

	Mean	Std. Deviation	N
Predicted Value	5.12012	.368030	381
Residual	.000000	.682822	381



\*Hypothesis about mu sci = 4.5, mu rel = 4.5.  
 TTEST /TESTVALU = 4.5 /VARI = sci.

**One-Sample Statistics**

	N	Mean	Std. Deviation	Std. Error Mean
sci	381	5.12012	.775688	.039740

**One-Sample Test**

	t	df	Test Value = 4.5	
			Sig. (2-tailed)	Mean Difference
sci	15.605	380	.000	.620122

TTEST /TESTVALU = 4.5 /VARI = rel.

**One-Sample Statistics**

	N	Mean	Std. Deviation	Std. Error Mean
rel	381	3.60728	1.475327	.075583

**One-Sample Test**

	t	df	Test Value = 4.5	
			Sig. (2-tailed)	Mean Difference
rel	-11.811	380	.000	-.892717



\*diff on rel.

TTEST GROUP = gender /VARI = rel.

**Group Statistics**

	Gender	N	Mean	Std. Deviation
rel	1	89	3.18230	1.274440
	2	292	3.73682	1.509650

**Independent Samples Test**

	t-test for Equality of Means				
	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference
rel	-3.140	379	.002	-.554512	.176587



MANOVA rel BY gender(1 2).

Source of Variation	SS	DF	MS	F	Sig of F
WITHIN CELLS	806.13	379	2.13		
Gender	20.97	1	20.97	9.86	.002
(Model)	20.97	1	20.97	9.86	.002
(Total)	827.10	380	2.18		

R-Squared = .025 Adjusted R-Squared = .023

REGRESS /DEP = rel /ENTER gender.

Model	R	R Square
1	.159	.025

Model	Sum of Squares	df	Mean Square	F	Sig.	
1	Regression	20.973	1	20.973	9.861	.002
	Residual	806.131	379	2.127		
Total	827.105	380				

Model	Unstandardized Coefficients				
	B	Std. Error	t	Sig.	
1	(Constant)	2.628	.321	8.193	.000
	Gender	.555	.177	3.140	.002

\*Dependent t; do average of rel and sci scores differ (not meaningful?).  
 TTEST PAIRED rel sci.

	Mean	N	Std. Deviation
Pair 1	rel	381	1.475327
	sci	381	.775688

	N	Correlation	Sig.
Pair 1	rel & sci	-.474	.000

Pair 1	rel - sci	Paired Differences			t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean			
		-1.512839	1.965760	.100709	-15.022	380	.000

COMPUTE diff = sci - rel.  
 TTEST TESTVALUE = 0 /VARI = diff.

	N	Mean	Std. Deviation	Std. Error Mean
diff	381	1.51284	1.965760	.100709

	t	df	Test Value = 0	
			Sig. (2-tailed)	Mean Difference
diff	15.022	380	.000	1.512839

\*analyses: sci rel & gender; gender controlling for rel.  
 CORR sci rel gender.

**Correlations**

	sci	rel
rel	-.474	
	.000	
Gender	.381	.159
	.003	.002
	.381	.381

GRAPH /SCATTERPLOT(BIVAR)=rel WITH sci BY gender.