```
FREQUENCIES VARIABLES=Salary FTE Rank Articles Experience Sex
  /STATISTICS=STDDEV MEAN
  /HISTOGRAM
  /ORDER=ANALYSIS.
```

Frequencies

Notes

Output Created		20-AUG-2013 14:08:52
Comments		
Input	Data	/Users/jeromy/teaching/org-research-methods/2013/content/03-group-differences/exercises/data/faculty.sav
	Active Dataset	DataSet4
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data …	44
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data.
Syntax		FREQUENCIES VARIABLES=Salary FTE Rank Articles Experience Sex /STATISTICS=STDDEV MEAN /HISTOGRAM.
Resources	Processor Time	00:00:00.82
	Elapsed Time	00:00:01.00

[DataSet4] /Users/jeromy/teaching/org-research-methods/2013/content/03-group-differences/exercises/data/faculty.sav

Statistics

		Salary 98	FTE Full-Time Equivalent	Rank	Articles Number of published academic articles	Experience Years as academic	Sex Sex: Female=0; Male=1
N	Valid	44	44	44	44	44	44
	Missing	0	0	0	0	0	0
Mean		47783.4214	.8580	2.95	11.95	10.95	.55
Std. Deviation		28192.4689	.27172	1.462	15.656	11.588	.504

Frequency Table

Salary 98

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	3528.90	1	2.3	2.3	2.3
	3601.89	1	2.3	2.3	4.5
	4705.92	1	2.3	2.3	6.8
	4738.86	1	2.3	2.3	9.1
	4919.85	1	2.3	2.3	11.4
	5999.14	1	2.3	2.3	13.6
	6812.82	1	2.3	2.3	15.9
	6962.94	1	2.3	2.3	18.2
	8130.87	1	2.3	2.3	20.5
	10162.89	1	2.3	2.3	22.7
	14324.94	1	2.3	2.3	25.0
	41424.00	2	4.5	4.5	29.5
	41999.76	1	2.3	2.3	31.8
	44499.84	1	2.3	2.3	34.1
	47499.84	1	2.3	2.3	36.4
	48159.84	1	2.3	2.3	38.6
	49762.80	1	2.3	2.3	40.9
	52050.00	1	2.3	2.3	43.2
	52600.80	1	2.3	2.3	45.5
	52999.92	1	2.3	2.3	47.7
	53262.00	1	2.3	2.3	50.0
	53550.96	1	2.3	2.3	52.3
	54000.00	1	2.3	2.3	54.5
	55050.96	1	2.3	2.3	56.8
	55060.80	1	2.3	2.3	59.1
	55072.80	1	2.3	2.3	61.4
	55550.88	1	2.3	2.3	63.6
	55999.92	1	2.3	2.3	65.9
	57499.92	1	2.3	2.3	68.2
	58827.84	1	2.3	2.3	70.5
	61992.96	1	2.3	2.3	72.7
	62256.00	1	2.3	2.3	75.0
	62476.80	1	2.3	2.3	77.3
	66157.92	1	2.3	2.3	79.5
	68127.84	1	2.3	2.3	81.8
	72055.92	1	2.3	2.3	84.1
	72225.84	1	2.3	2.3	86.4
	74956.80	1	2.3	2.3	88.6
	75040.80	1	2.3	2.3	90.9
	83235.84	1	2.3	2.3	93.2
	83358.00	1	2.3	2.3	95.5
	96799.92	1	2.3	2.3	97.7
	123600.00	1	2.3	2.3	100.0
	Total	44	100.0	100.0	

FTE Full-Time Equivalent

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	.25	5	11.4	11.4	11.4
	.50	5	11.4	11.4	22.7
	1.00	34	77.3	77.3	100.0
	Total	44	100.0	100.0	

Rank

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 Adjunct	11	25.0	25.0	25.0
	2 Visiting	5	11.4	11.4	36.4
	3 Assistant	12	27.3	27.3	63.6
	4 Associate	7	15.9	15.9	79.5
	5 Professor	9	20.5	20.5	100.0
	Total	44	100.0	100.0	

Articles Number of published academic articles

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	0	16	36.4	36.4	36.4
	1	1	2.3	2.3	38.6
	2	2	4.5	4.5	43.2
	3	1	2.3	2.3	45.5
	4	1	2.3	2.3	47.7
	5	2	4.5	4.5	52.3
	8	1	2.3	2.3	54.5
	10	1	2.3	2.3	56.8
	11	1	2.3	2.3	59.1
	13	2	4.5	4.5	63.6
	14	1	2.3	2.3	65.9
	15	1	2.3	2.3	68.2
	17	1	2.3	2.3	70.5
	18	1	2.3	2.3	72.7
	19	2	4.5	4.5	77.3
	21	2	4.5	4.5	81.8
	24	1	2.3	2.3	84.1
	25	1	2.3	2.3	86.4
	26	1	2.3	2.3	88.6
	28	1	2.3	2.3	90.9
	40	1	2.3	2.3	93.2
	41	1	2.3	2.3	95.5
	50	1	2.3	2.3	97.7
	71	1	2.3	2.3	100.0
	Total	44	100.0	100.0	

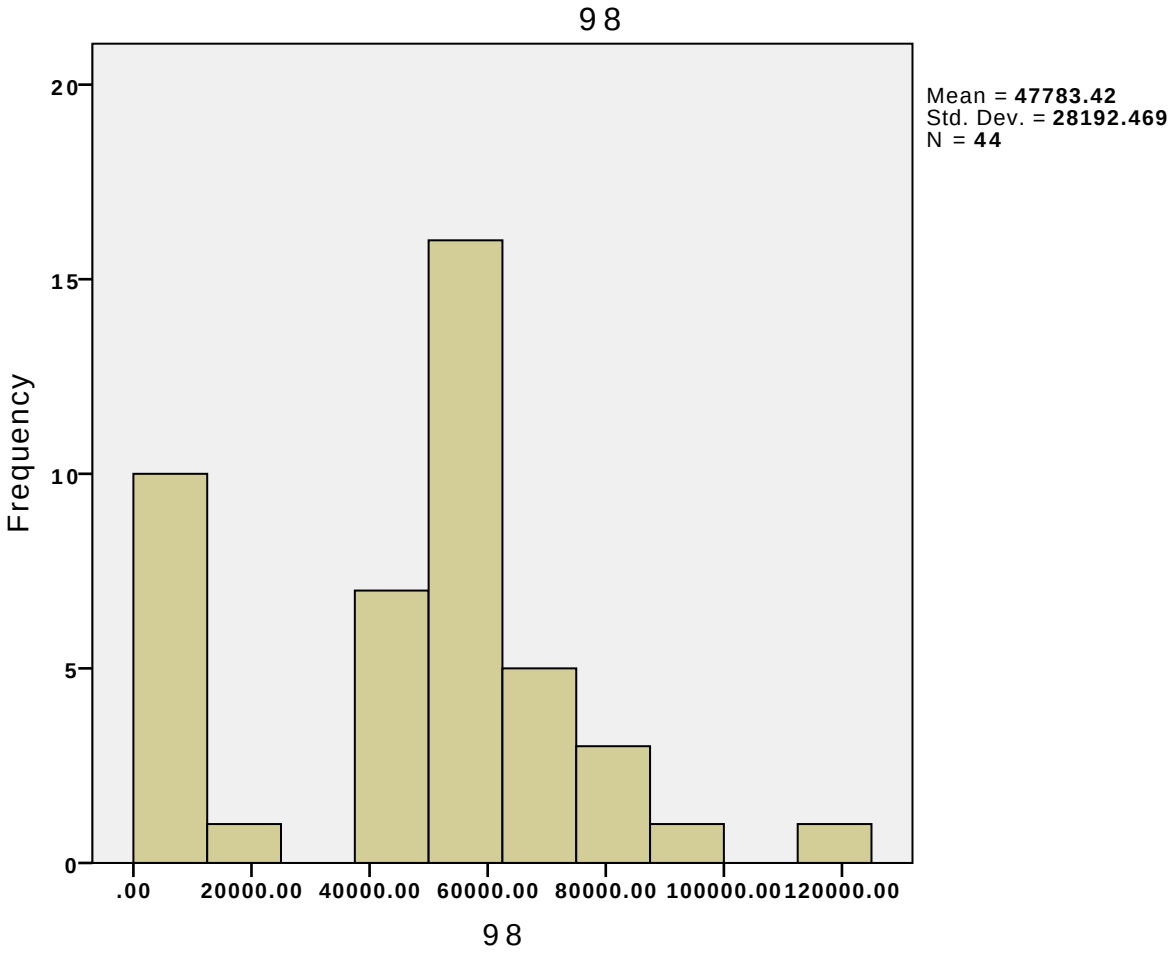
Experience Years as academic

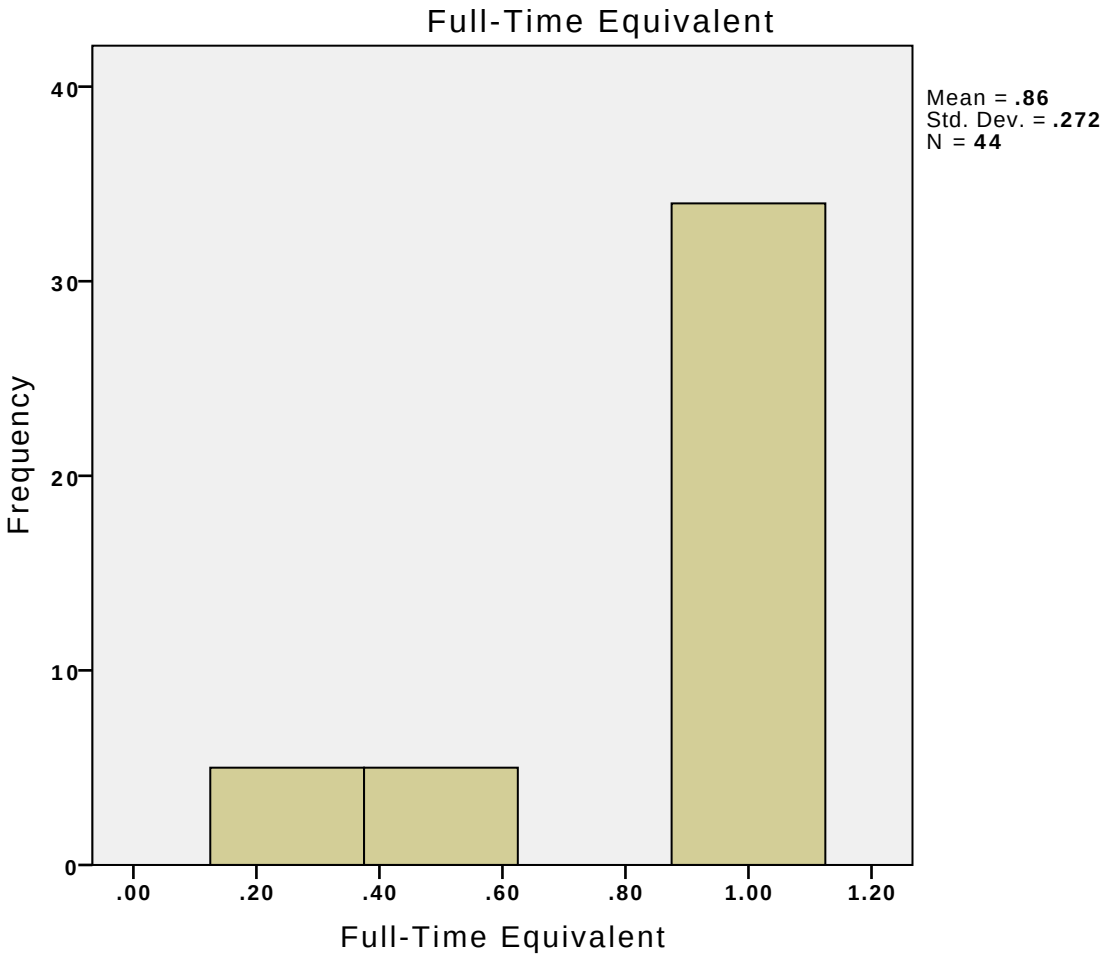
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	0	12	27.3	27.3	27.3
	1	1	2.3	2.3	29.5
	2	3	6.8	6.8	36.4
	3	3	6.8	6.8	43.2
	4	1	2.3	2.3	45.5
	5	2	4.5	4.5	50.0
	7	2	4.5	4.5	54.5
	8	1	2.3	2.3	56.8
	10	1	2.3	2.3	59.1
	11	1	2.3	2.3	61.4
	15	2	4.5	4.5	65.9
	16	1	2.3	2.3	68.2
	18	3	6.8	6.8	75.0
	22	1	2.3	2.3	77.3
	24	2	4.5	4.5	81.8
	26	1	2.3	2.3	84.1
	27	2	4.5	4.5	88.6
	28	1	2.3	2.3	90.9
	29	1	2.3	2.3	93.2
	32	2	4.5	4.5	97.7
	38	1	2.3	2.3	100.0
	Total	44	100.0	100.0	

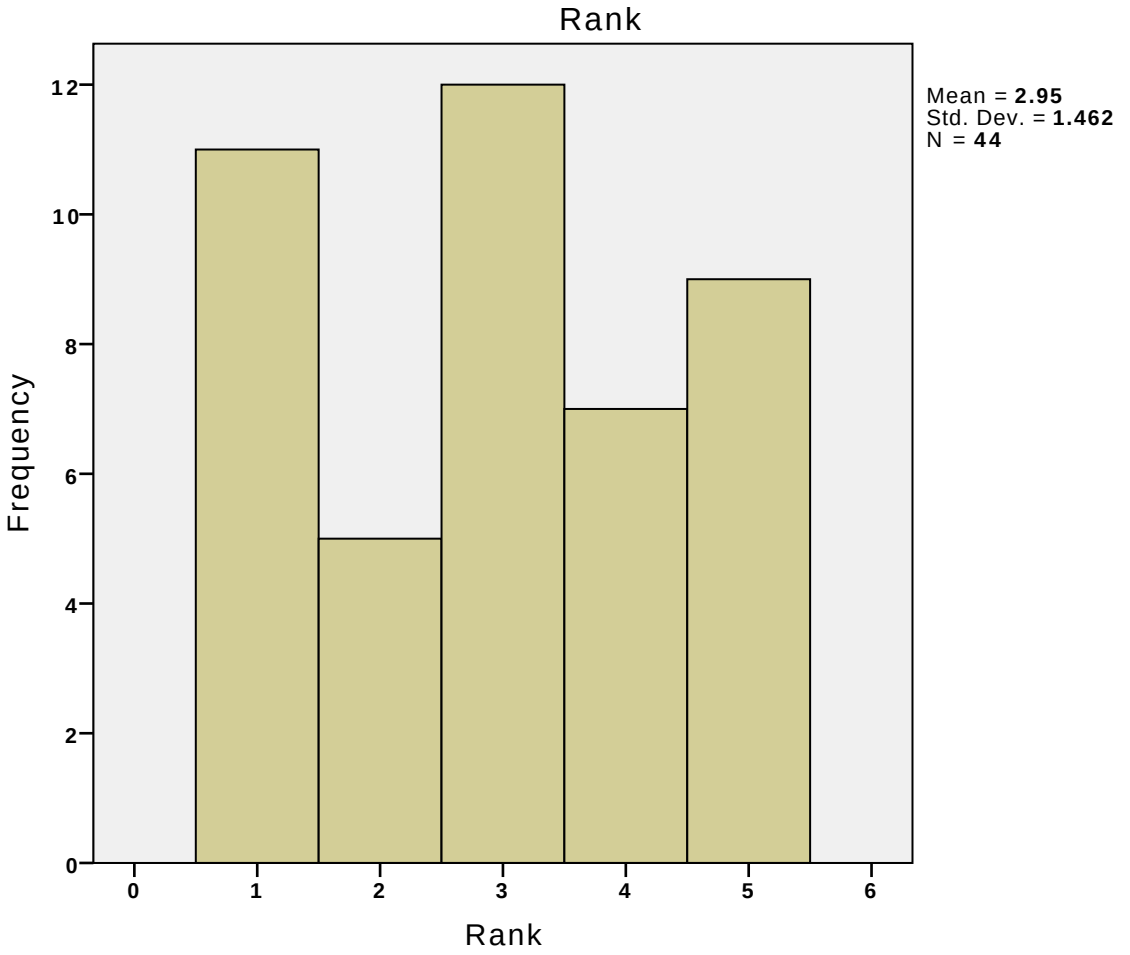
Sex Sex:Female=0;Male=1

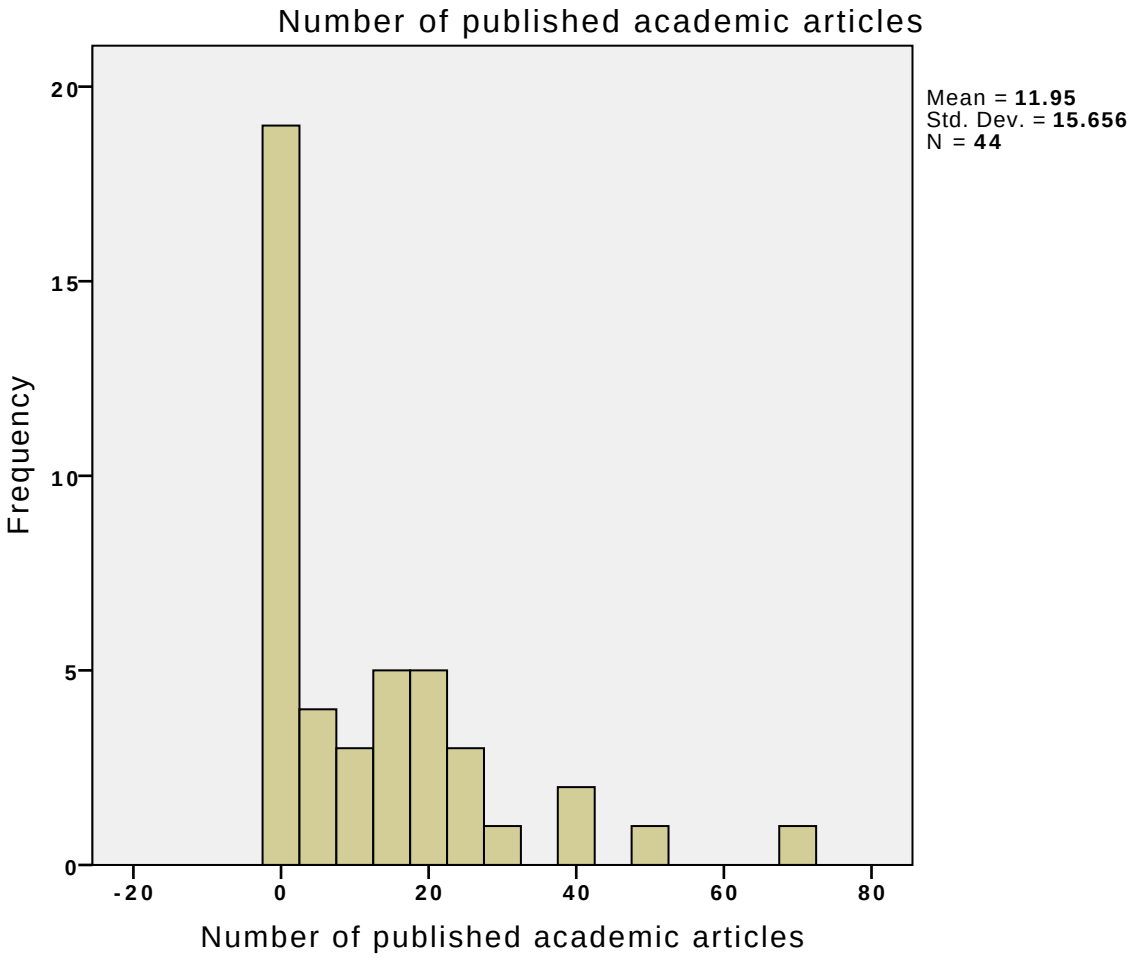
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	0 Female	20	45.5	45.5	45.5
	1 Male	24	54.5	54.5	100.0
	Total	44	100.0	100.0	

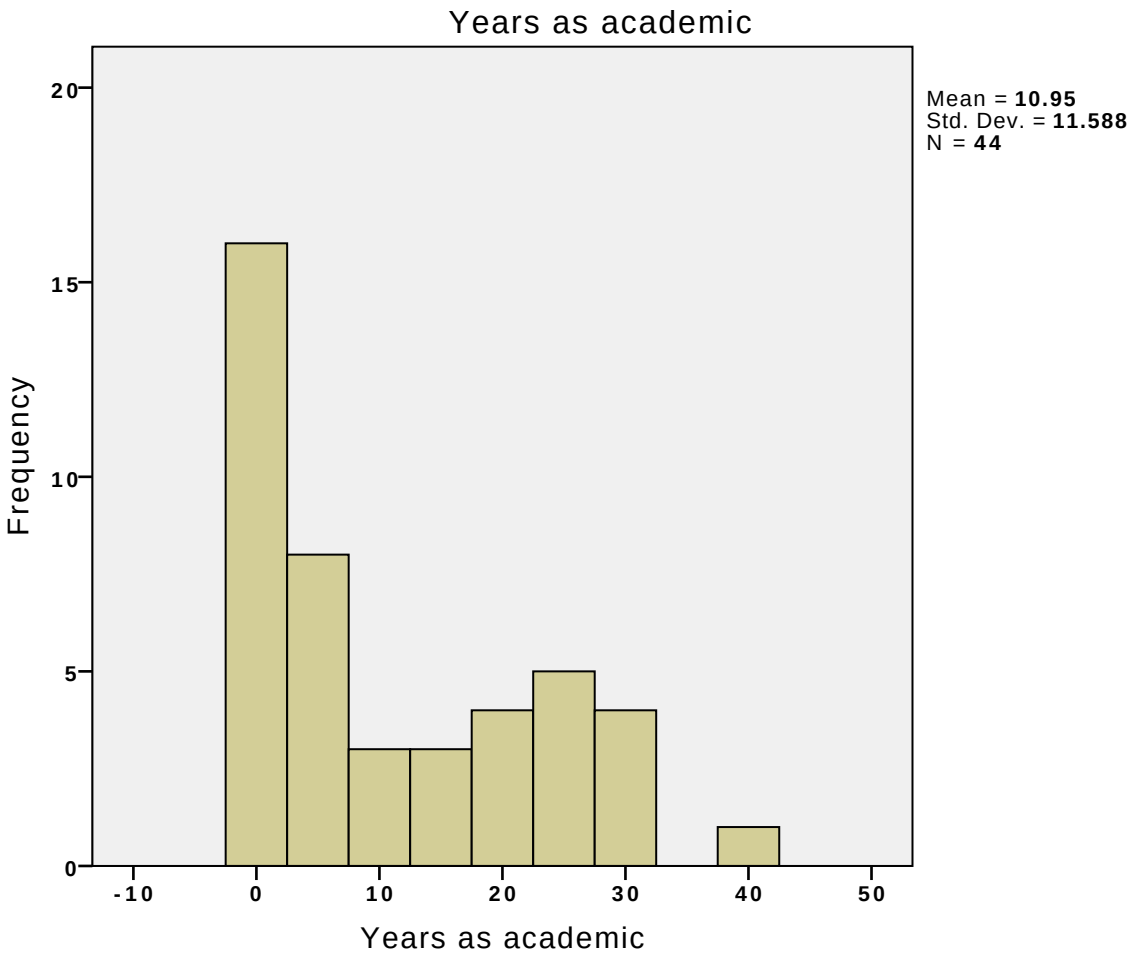
Histogram

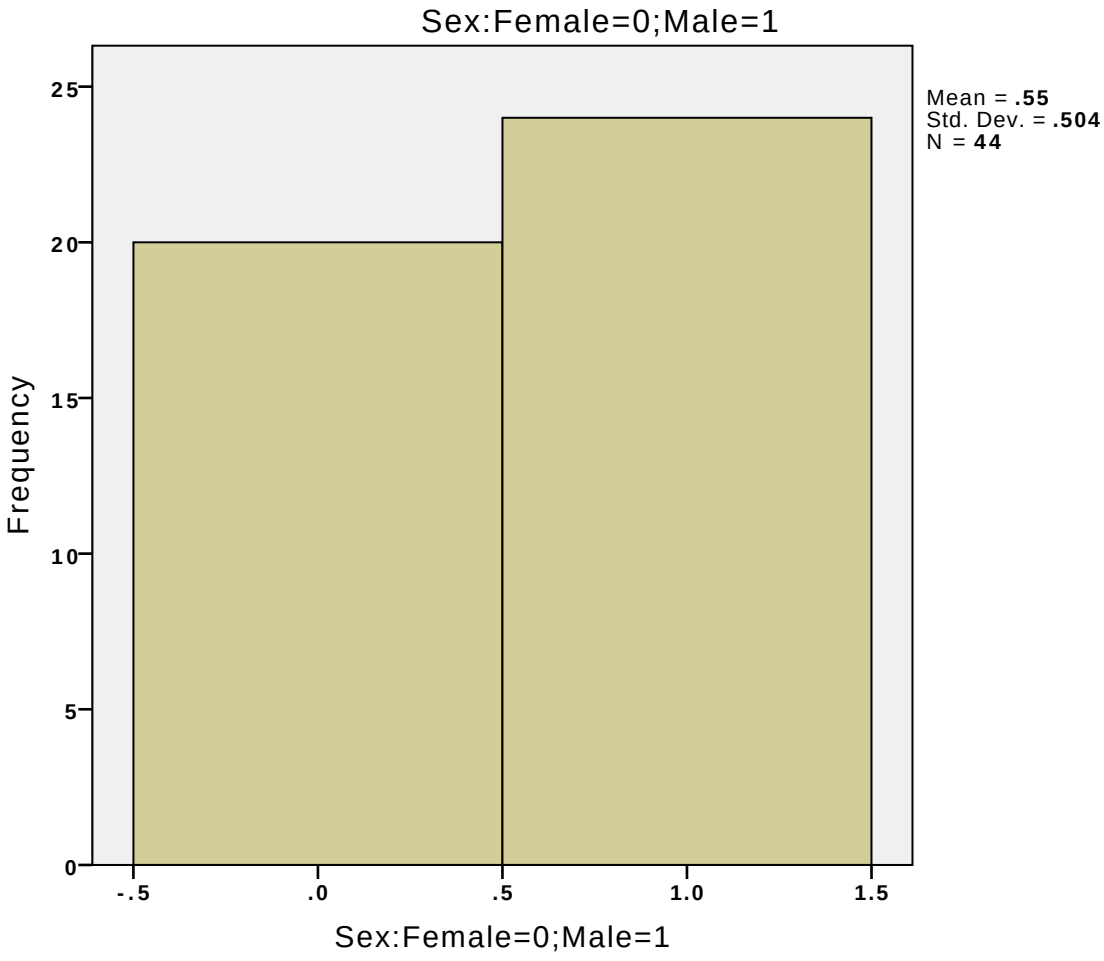

98
Mean = 47783.42
Std. Dev. = 28192.469
N = 44
Frequency
20
15
10
5
0
.00
20000.00
40000.00
60000.00
80000.00
100000.00
120000.00
98


Full-Time Equivalent
Mean = .86
Std. Dev. = .272
N = 44
Frequency
40
30
20
10
0
.00
.20
.40
.60
.80
1.00
1.20
Full-Time Equivalent


Rank
Mean = 2.95
Std. Dev. = 1.462
N = 44
Frequency
Rank
0
1
2
3
4
5
6
0
2
4
6
8
10
12


Number of published academic articles
Mean = 11.95
Std. Dev. = 15.656
N = 44
Frequency
Number of published academic articles
-20
0
20
40
60
80
0
5
10
15
20


Years as academic
Mean = 10.95
Std. Dev. = 11.588
N = 44
Frequency
20
15
10
5
0
-10
0
10
20
30
40
50
Years as academic


Sex:Female=0;Male=1
Mean = .55
Std. Dev. = .504
N = 44
Frequency
25
20
15
10
5
0
-.5
.0
.5
1.0
1.5
Sex:Female=0;Male=1

```
CORRELATIONS
 /VARIABLES=Salary FTE Rank Articles Experience Sex
 /PRINT=TWOTAIL SIG
 /MISSING=PAIRWISE.
```

Correlations

Notes

Output Created		**20-AUG-2013 14:08:53**
Comments		
Input	**Data**	**/Users/jeromy/teaching/org-research-methods/2013/content/03-group-differences/exercises/data/faculty.sav**
	Active Dataset	**DataSet4**
	Filter	**<none>**
	Weight	**<none>**
	Split File	**<none>**
	N of Rows in Working Data …	**44**
Missing Value Handling	**Definition of Missing**	**User-defined missing values are treated as missing.**
	Cases Used	**Statistics for each pair of variables are based on all the cases with valid data for that pair.**
Syntax		**CORRELATIONS /VARIABLES=Salary FTE Rank Articles Experience Sex…**
Resources	**Processor Time**	**00:00:00.03**
	Elapsed Time	**00:00:00.00**

```
[DataSet4] /Users/jeromy/teaching/org-research-methods/2013/content/03-group-differences/exercises/data/faculty.sav
```

Correlations

Pearson Correlation

	Salary 98	FTE Full-Time Equivalent	Rank	Articles Number of published academic articles	Experience Years as academic	Sex Sex: Female=0; Male=1
Salary 98	1	.800	.921	.620	.593	.059
FTE Full-Time Equivalent	.800	1	.715	.351	.304	.027
Rank	.921	.715	1	.676	.635	.066
Articles Number of published academic articles	.620	.351	.676	1	.625	.248
Experience Years as academic	.593	.304	.635	.625	1	.196
Sex Sex: Female=0; Male=1	.059	.027	.066	.248	.196	1

```
T-TEST GROUPS=Sex(0 1)
```

```
  /MISSING=ANALYSIS
  /VARIABLES=Salary
  /CRITERIA=CI(.95).
```

T-Test

Notes

Output Created		20-AUG-2013 14:42:42
Comments		
Input	Data	/Users/jeromy/teaching/org-research-methods/2013/content/03-group-differences/exercises/data/faculty.sav
	Active Dataset	DataSet4
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data …	44
Missing Value Handling	Definition of Missing	User defined missing values are treated as missing.
	Cases Used	Statistics for each analysis are based on the cases with no missing or out-of-range data for any variable in the analysis.
Syntax		T-TEST GROUPS=Sex(0 1) /MISSING=ANALYSIS /VARIABLES=Salary /CRITERIA=CI(.95).
Resources	Processor Time	00:00:00.00
	Elapsed Time	00:00:00.00

```
[DataSet4] /Users/jeromy/teaching/org-research-methods/2013/content/03-group-differences/exe
rcises/data/faculty.sav
```

Group Statistics

	Sex Sex: Female=0; Male=1	N	Mean	Std. Deviation	Std. Error Mean
Salary 98	0 Female	20	45971.1740	31025.4571	6937.50312
	1 Male	24	49293.6275	26182.9973	5344.58195

Independent Samples Test

			Salary 98	
			Equal variances assumed	Equal variances not assumed
Levene's Test for Equality of Variances	F		.537	
	Sig.		.468	
t-test for Equality of Means	t		-.385	-.379
	df		42	37.371
	Sig. (2-tailed)		.702	.707
	Mean Difference		-3322.4535	-3322.4535
	Std. Error Difference		8621.48243	8757.48284
	95% Confidence Interval of the Difference	Lower	-20721.309	-21060.851
		Upper	14076.4024	14415.9443

```
MEANS TABLES=Salary BY FTE
  /CELLS MEAN COUNT STDDEV.
```

Means

Notes

Output Created		20-AUG-2013 15:07:47
Comments		
Input	Data	/Users/jeromy/teaching/org-research-methods/2013/content/03-group-differences/exercises/data/faculty.sav
	Active Dataset	DataSet4
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data …	44
Missing Value Handling	Definition of Missing	For each dependent variable in a table, user-defined missing values for the dependent and all grouping variables are treated as missing.
	Cases Used	Cases used for each table have no missing values in any independent variable, and not all dependent variables have missing values.
Syntax		MEANS TABLES=Salary BY FTE /CELLS MEAN COUNT..
Resources	Processor Time	00:00:00.00
	Elapsed Time	00:00:00.00

[DataSet4] /Users/jeromy/teaching/org-research-methods/2013/content/03-group-differences/exercises/data/faculty.sav

Case Processing Summary

	Cases					
	Included		Excluded		Total	
	N	Percent	N	Percent	N	Percent
Salary 98 * FTE Full-Time Equivalent	44	100.0%	0	0.0%	44	100.0%

Report

Salary 98

FTE Full-Time Equivalent	Mean	N	Std. Deviation
.25	4299.0840	5	675.19104
.50	7613.7320	5	1615.35877
1.00	60085.4841	34	18665.1140
Total	47783.4214	44	28192.4689

```
MEANS TABLES=Salary BY FTE Rank
  /CELLS MEAN COUNT STDDEV.
```

Means

Notes

Output Created		20-AUG-2013 15:09:10
Comments		
Input	Data	/Users/jeromy/teaching/org-research-methods/2013/content/03-group-differences/exercises/data/faculty.sav
	Active Dataset	DataSet4
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data …	44
Missing Value Handling	Definition of Missing	For each dependent variable in a table, user-defined missing values for the dependent and all grouping variables are treated as missing.
	Cases Used	Cases used for each table have no missing values in any independent variable, and not all dependent variables have missing values.
Syntax		MEANS TABLES=Salary BY FTE Rank /CELLS MEAN COUNT..
Resources	Processor Time	00:00:00.00
	Elapsed Time	00:00:00.00

[DataSet4] /Users/jeromy/teaching/org-research-methods/2013/content/03-group-differences/exercises/data/faculty.sav

Case Processing Summary

	Cases					
	Included		Excluded		Total	
	N	Percent	N	Percent	N	Percent
Salary 98 * FTE Full-Time Equivalent	44	100.0%	0	0.0%	44	100.0%
Salary 98 * Rank	44	100.0%	0	0.0%	44	100.0%

Salary 98 * FTE Full-Time Equivalent

Salary 98

FTE Full-Time Equivalent	Mean	N	Std. Deviation
.25	4299.0840	5	675.19104
.50	7613.7320	5	1615.35877
1.00	60085.4841	34	18665.1140
Total	47783.4214	44	28192.4689

Salary 98 * Rank

Salary 98

Rank	Mean	N	Std. Deviation
1 Adjunct	6717.1836	11	3215.49450
2 Visiting	43369.4880	5	2635.50304
3 Assistant	54412.9000	12	2469.12362
4 Associate	59349.4629	7	7869.47764
5 Professor	82592.5600	9	17993.5375
Total	47783.4214	44	28192.4689

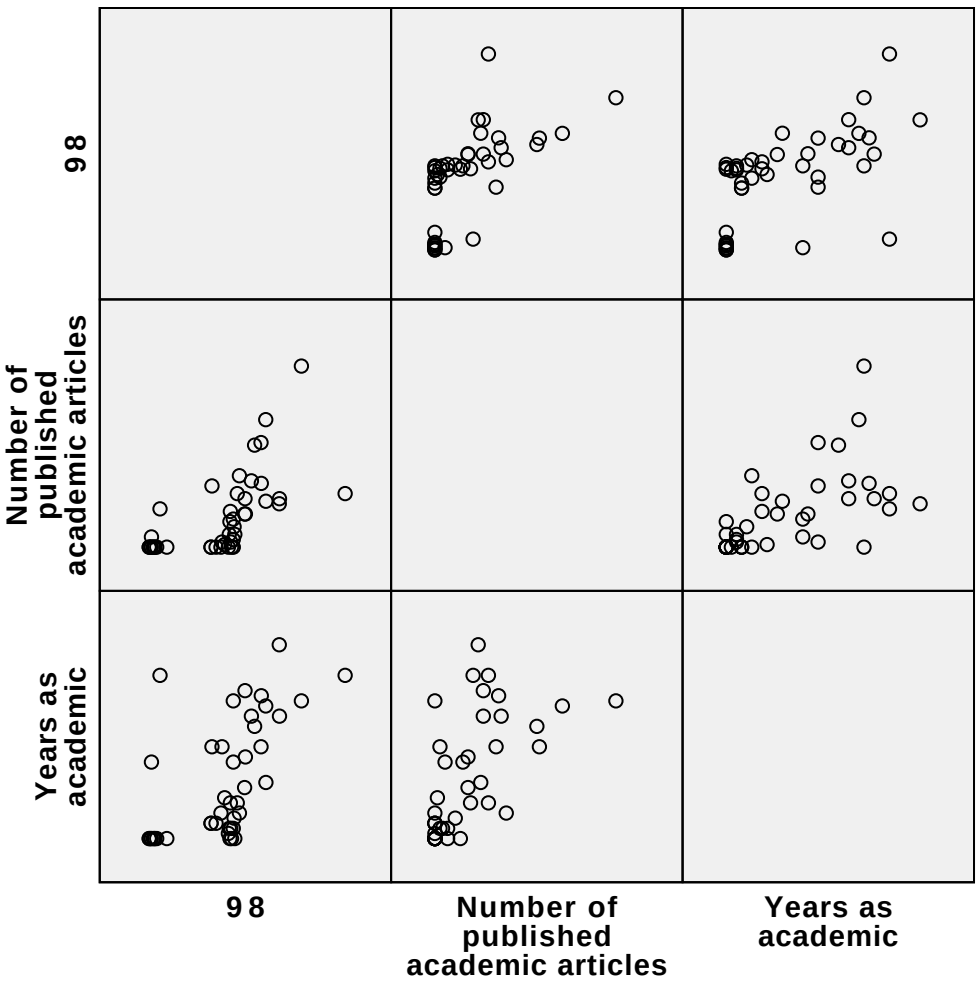
```
GRAPH
  /SCATTERPLOT(MATRIX)=Salary Articles Experience
  /MISSING=LISTWISE.
```

Graph

Notes

Output Created		20-AUG-2013 15:10:50
Comments		
Input	Data	/Users/jeromy/teaching/org-research-methods/2013/content/03-group-differences/exercises/data/faculty.sav
	Active Dataset	DataSet4
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data ...	44
Syntax		GRAPH /SCATTERPLOT (MATRIX)=Salary ...
Resources	Processor Time	00:00:00.16
	Elapsed Time	00:00:01.00

[DataSet4] /Users/jeromy/teaching/org-research-methods/2013/content/03-group-differences/exercises/data/faculty.sav




```
UNIANOVA Salary BY Sex WITH Articles Experience FTE
 /METHOD=SSTYPE(3)
 /INTERCEPT=INCLUDE
 /EMMEANS=TABLES(Sex) WITH(Articles=MEAN Experience=MEAN FTE=MEAN)
 /CRITERIA=ALPHA(.05)
 /DESIGN=Articles Experience FTE Sex.
```

Univariate Analysis of Variance

Notes

Output Created		20-AUG-2013 15:20:50
Comments		
Input	Data	/Users/jeromy/teaching/org-research-methods/2013/content/03-group-differences/exercises/data/faculty.sav
	Active Dataset	DataSet4
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data …	44
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the model.
Syntax		UNIANOVA Salary BY Sex WITH Articles Experience FTE /METHOD=SSTYPE(3) /INTERCEPT=INCLUDE /EMMEANS=TABLES (Sex) WITH (Articles=MEAN …
Resources	Processor Time	00:00:00.01
	Elapsed Time	00:00:00.00

[DataSet4] /Users/jeromy/teaching/org-research-methods/2013/content/03-group-differences/exercises/data/faculty.sav

Between-Subjects Factors

		Value Label	N
Sex Sex: Female=0; Male=1	0	Female	20
	1	Male	24

Tests of Between-Subjects Effects

Dependent Variable: Salary 98

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	2.776E+10[a]	4	6.941E+9	42.197	.000
Intercept	1.670E+9	1	1.670E+9	10.155	.003
Articles	1.262E+9	1	1.262E+9	7.671	.009
Experience	1.311E+9	1	1.311E+9	7.970	.007
FTE	1.185E+10	1	1.185E+10	72.052	.000
Sex	159554342	1	159554342	.970	.331
Error	6.415E+9	39	164480978		
Total	1.346E+11	44			
Corrected Total	3.418E+10	43			

a. R Squared = .812 (Adjusted R Squared = .793)

Estimated Marginal Means

Sex:Female=0;Male=1

Dependent Variable: Salary 98

Sex:Female=0; Male=1	Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
0 Female	49945.587[a]	2925.323	44028.563	55862.611
1 Male	45981.617[a]	2661.756	40597.706	51365.527

a. Covariates appearing in the model are evaluated at the following values: Articles Number of published academic articles = 11.95, Experience Years as academic = 10.95, FTE Full-Time Equivalent = .8580.

```
 USE ALL.
COMPUTE filter_$=(Rank ~= 1).
VARIABLE LABELS filter_$ 'Rank ~= 1 (FILTER)'.
VALUE LABELS filter_$ 0 'Not Selected' 1 'Selected'.
FORMATS filter_$ (f1.0).
FILTER BY filter_$.
EXECUTE.
UNIANOVA Salary BY Sex WITH Articles Experience FTE
  /METHOD=SSTYPE(3)
  /INTERCEPT=INCLUDE
  /EMMEANS=TABLES(Sex) WITH(Articles=MEAN Experience=MEAN FTE=MEAN)
  /CRITERIA=ALPHA(.05)
  /DESIGN=Articles Experience FTE Sex.
```

Univariate Analysis of Variance

Notes

Output Created		20-AUG-2013 15:38:26
Comments		
Input	Data	/Users/jeromy/teaching/org-research-methods/2013/content/03-group-differences/exercises/data/faculty.sav
	Active Dataset	DataSet4
	Filter	filter_$ Rank ~= 1 (FILTER)
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data …	33
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the model.
Syntax		UNIANOVA Salary BY Sex WITH Articles Experience FTE /METHOD=SSTYPE(3) /INTERCEPT=INCLUDE /EMMEANS=TABLES (Sex) WITH (Articles=MEAN …
Resources	Processor Time	00:00:00.01
	Elapsed Time	00:00:00.00

[DataSet4] /Users/jeromy/teaching/org-research-methods/2013/content/03-group-differences/exercises/data/faculty.sav

Between-Subjects Factors

		Value Label	N
Sex Sex: Female=0; Male=1	0	Female	14
	1	Male	19

Tests of Between-Subjects Effects

Dependent Variable: Salary 98

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	5.352E+9[a]	3	1.784E+9	12.973	.000
Intercept	.000	0	.	.	.
Articles	861602672	1	861602672	6.266	.018
Experience	1.459E+9	1	1.459E+9	10.614	.003
FTE	.000	0	.	.	.
Sex	297535938	1	297535938	2.164	.152
Error	3.988E+9	29	137504557		
Total	1.340E+11	33			
Corrected Total	9.339E+9	32			

a. R Squared = .573 (Adjusted R Squared = .529)

Estimated Marginal Means

Sex:Female=0;Male=1

Dependent Variable: Salary 98

Sex:Female=0; Male=1	Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
0 Female	65069.431[a]	3185.450	58554.453	71584.408
1 Male	58821.552[a]	2722.815	53252.770	64390.334

a. Covariates appearing in the model are evaluated at the following values: Articles Number of published academic articles = 15.36, Experience Years as academic = 13.18, FTE Full-Time Equivalent = 1.0000.

```
 COMPUTE articles_per_year=Articles/Experience.
EXECUTE.

>Warning # 511
>A division by zero has been attempted on the indicated command.  The result
>has been set to the system-missing value.
>Command line: 432  Current case: 16  Current splitfile group: 1


>Warning # 511
>A division by zero has been attempted on the indicated command.  The result
>has been set to the system-missing value.
>Command line: 432  Current case: 21  Current splitfile group: 1


>Warning # 511
>A division by zero has been attempted on the indicated command.  The result
>has been set to the system-missing value.
>Command line: 432  Current case: 24  Current splitfile group: 1


>Warning # 511
>A division by zero has been attempted on the indicated command.  The result
>has been set to the system-missing value.
>Command line: 432  Current case: 34  Current splitfile group: 1
```

```
>Warning # 511
>A division by zero has been attempted on the indicated command.  The result
>has been set to the system-missing value.
>Command line: 432  Current case: 36  Current splitfile group: 1


>Warning # 511
>A division by zero has been attempted on the indicated command.  The result
>has been set to the system-missing value.
>Command line: 432  Current case: 37  Current splitfile group: 1


>Warning # 511
>A division by zero has been attempted on the indicated command.  The result
>has been set to the system-missing value.
>Command line: 432  Current case: 38  Current splitfile group: 1


>Warning # 511
>A division by zero has been attempted on the indicated command.  The result
>has been set to the system-missing value.
>Command line: 432  Current case: 39  Current splitfile group: 1


>Warning # 511
>A division by zero has been attempted on the indicated command.  The result
>has been set to the system-missing value.
>Command line: 432  Current case: 41  Current splitfile group: 1


>Warning # 511
>A division by zero has been attempted on the indicated command.  The result
>has been set to the system-missing value.
>Command line: 432  Current case: 42  Current splitfile group: 1


>Warning # 92
>The limit for MXWARNS warnings in this data pass has been exceeded.  Further
>warnings have been suppressed.  To change the limit use SET MXWARNS.
REGRESSION
  /MISSING LISTWISE
  /STATISTICS COEFF OUTS R ANOVA
  /CRITERIA=PIN(.05) POUT(.10)
  /NOORIGIN
  /DEPENDENT Salary
  /METHOD=ENTER articles_per_year Experience.
```

Regression

Notes

Output Created		20-AUG-2013 15:46:56
Comments		
Input	Data	/Users/jeromy/teaching/org-research-methods/2013/content/03-group-differences/exercises/data/faculty.sav
	Active Dataset	DataSet4
	Filter	filter_$ Rank ~= 1 (FILTER)
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data …	33
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on cases with no missing values for any variable used.
Syntax		REGRESSION /MISSING LISTWISE /STATISTICS COEFF OUTS R ANOVA /CRITERIA=PIN(.05) POUT(.10) /NOORIGIN.
Resources	Processor Time	00:00:00.01
	Elapsed Time	00:00:00.00
	Memory Required	3568 bytes
	Additional Memory Required for Residual Plots	0 bytes

[DataSet4] /Users/jeromy/teaching/org-research-methods/2013/content/03-group-differences/exercises/data/faculty.sav

Variables Entered/Removed[a]

Model	Variables Entered	Variables Removed	Method
1	Experience Years as academic, articles_per_year[b]	.	Enter

a. Dependent Variable: Salary 98

b. All requested variables entered.

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.733[a]	.537	.503	12535.7263

a. Predictors: (Constant), Experience Years as academic, articles_per_year

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	4.924E+9	2	2.462E+9	15.666	.000[b]
	Residual	4.243E+9	27	157144434		
	Total	9.166E+9	29			

a. Dependent Variable: Salary 98

b. Predictors: (Constant), Experience Years as academic, articles_per_year

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	40885.905	4688.927		8.720	.000
	articles_per_year	3643.140	1927.785	.249	1.890	.070
	Experience Years as academic	1160.549	213.228	.717	5.443	.000

a. Dependent Variable: Salary 98

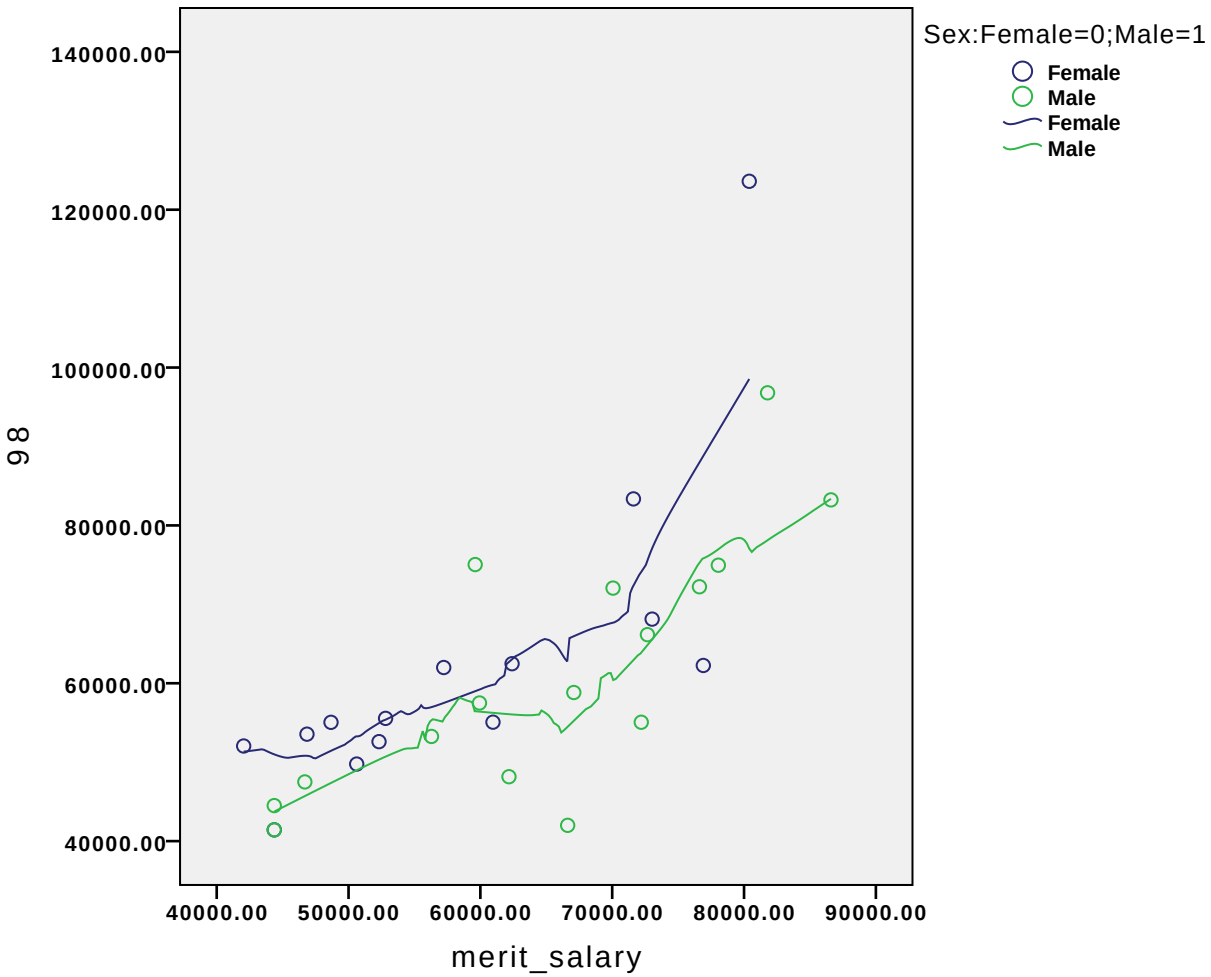
```
 COMPUTE merit_salary=40885 + 1160 * Experience + 3643 * articles_per_year.
EXECUTE.
GRAPH
  /SCATTERPLOT(BIVAR)=merit_salary WITH Salary BY Experience
  /MISSING=LISTWISE.


 GRAPH
  /SCATTERPLOT(BIVAR)=merit_salary WITH Salary BY sex
  /MISSING=LISTWISE.
```

Graph

Notes

Output Created		20-AUG-2013 15:51:53
Comments		
Input	Data	/Users/jeromy/teaching/org-research-methods/2013/content/03-group-differences/exercises/data/faculty.sav
	Active Dataset	DataSet4
	Filter	filter_$ Rank ~= 1 (FILTER)
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data …	33
Syntax		GRAPH /SCATTERPLOT(BIVAR) =merit_salary WITH …
Resources	Processor Time	00:00:00.25
	Elapsed Time	00:00:01.00

```
[DataSet4] /Users/jeromy/teaching/org-research-methods/2013/content/03-group-differences/exe
rcises/data/faculty.sav
```




```
UNIANOVA Salary BY Sex WITH merit_salary
 /METHOD=SSTYPE(3)
 /INTERCEPT=INCLUDE
 /EMMEANS=TABLES(Sex) WITH(merit_salary=MEAN)
 /CRITERIA=ALPHA(.05)
 /DESIGN=Sex*merit_salary Sex merit_salary.
```

Univariate Analysis of Variance

Notes

Output Created		20-AUG-2013 15:56:58
Comments		
Input	Data	/Users/jeromy/teaching/org-research-methods/2013/content/03-group-differences/exercises/data/faculty.sav
	Active Dataset	DataSet4
	Filter	filter_$ Rank ~= 1 (FILTER)
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data …	33
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the model.
Syntax		UNIANOVA Salary BY Sex WITH merit_salary /METHOD=SSTYPE(3) /INTERCEPT=INCLUDE /EMMEANS=TABLES (Sex) WITH (merit_salary=MEAN)…
Resources	Processor Time	00:00:00.01
	Elapsed Time	00:00:00.00

[DataSet4] /Users/jeromy/teaching/org-research-methods/2013/content/03-group-differences/exercises/data/faculty.sav

Between-Subjects Factors

		Value Label	N
Sex Sex: Female=0; Male=1	0	Female	14
	1	Male	16

Tests of Between-Subjects Effects

Dependent Variable: Salary 98

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	5.457E+9[a]	3	1.819E+9	12.747	.000
Intercept	31938024.3	1	31938024.3	.224	.640
Sex * merit_salary	72721057.6	1	72721057.6	.510	.482
Sex	15972691.4	1	15972691.4	.112	.741
merit_salary	5.450E+9	1	5.450E+9	38.196	.000
Error	3.710E+9	26	142687812		
Total	1.252E+11	30			
Corrected Total	9.166E+9	29			

a. R Squared = .595 (Adjusted R Squared = .549)

Estimated Marginal Means

Sex:Female=0;Male=1

Dependent Variable: Salary 98

Sex:Female=0; Male=1	Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
0 Female	67026.126[a]	3329.480	60182.282	73869.969
1 Male	58746.928[a]	3078.468	52419.046	65074.810

a. Covariates appearing in the model are evaluated at the following values: merit_salary = 62177.0200.