

How To in SPSS

How to (in version 12 on)

... copy numbered variables from an original variable

Untitled - SPSS Data Editor

File Edit View Data Transform Analyze Graphs Utilities Window Help

	Name	Type	Width	Decimals	Label	Values	Mis
1	id	Numeric	8	0		None	None
2	q1	Numeric	8	2		{1.00, Agree ...	None
3							

Untitled - SPSS Data Editor

File Edit View Data Transform Analyze Graphs L

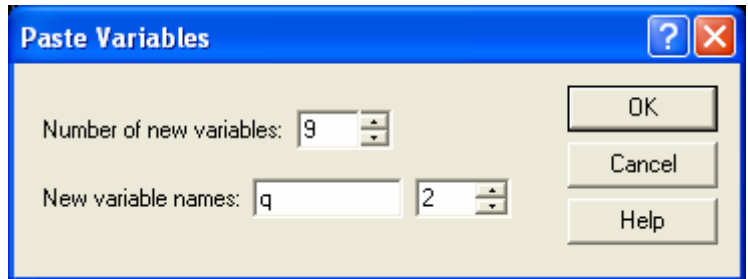
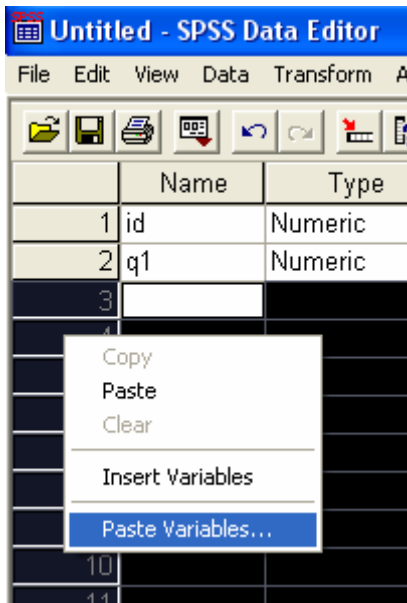
	Name	Type	Width	D
1	id	Numeric	8	0
2	q1	Numeric	8	2

- Copy
- Paste
- Clear
- Insert Variables
- Paste Variables...

Untitled - SPSS Data Editor

File Edit View Data Transform Analyze Graphs Utilities Window Help

	Name	Type	Width	Decimals	Label	Values	Mis
1	id	Numeric	8	0		None	None
2	q1	Numeric	8	2		{1.00, Agree}...	None
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							

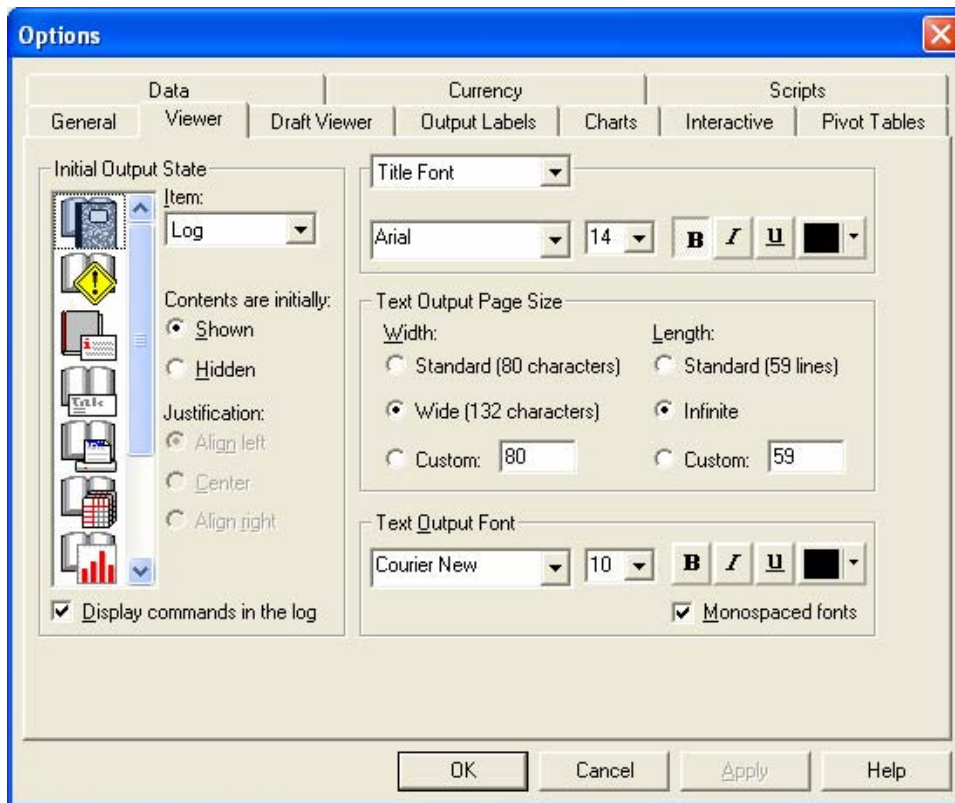


The screenshot shows the 'Untitled - SPSS Data Editor' window with a more complete menu bar: 'File', 'Edit', 'View', 'Data', 'Transform', 'Analyze', 'Graphs', 'Utilities', 'Window', and 'Help'. The toolbar includes icons for file operations, editing, and analysis. The main window displays a table with columns: Name, Type, Width, Decimals, Label, Values, and M. The table contains 11 rows of variables, all of type 'Numeric' with a width of 8 and 2 decimal places. The 'Values' column contains '{1.00, Agree}...' for all variables except 'id', which has 'None'. The 'M' column contains 'None' for all variables.

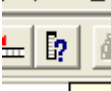
	Name	Type	Width	Decimals	Label	Values	M
1	id	Numeric	8	0		None	None
2	q1	Numeric	8	2		{1.00, Agree}...	None
3	q2	Numeric	8	2		{1.00, Agree}...	None
4	q3	Numeric	8	2		{1.00, Agree}...	None
5	q4	Numeric	8	2		{1.00, Agree}...	None
6	q5	Numeric	8	2		{1.00, Agree}...	None
7	q6	Numeric	8	2		{1.00, Agree}...	None
8	q7	Numeric	8	2		{1.00, Agree}...	None
9	q8	Numeric	8	2		{1.00, Agree}...	None
10	q9	Numeric	8	2		{1.00, Agree}...	None
11	q10	Numeric	8	2		{1.00, Agree}...	None
12							

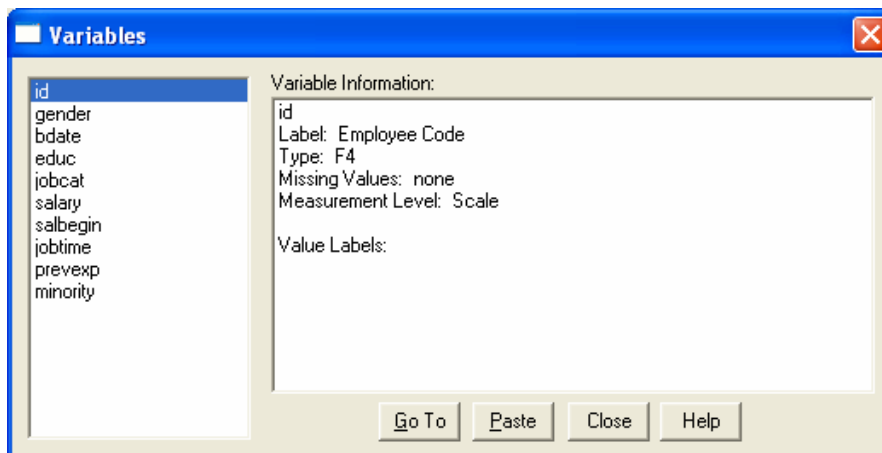
.... have the syntax or syntax-equivalent appear in the output

Click on Edit/Options/Viewer, check *Display commands in the log*:



... paste variable names into the syntax window

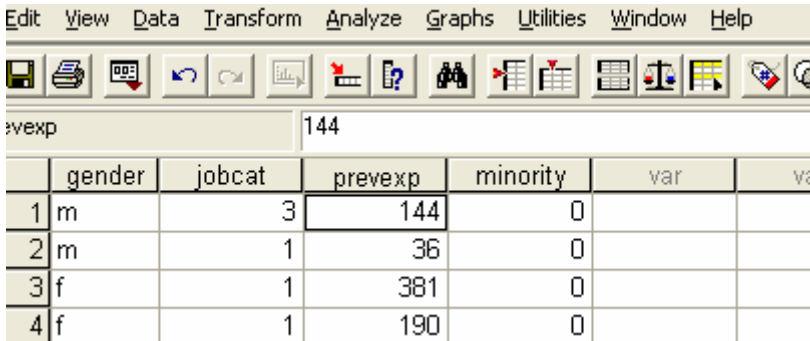
Click on  then either double-click on a variable or click once and click on *Paste*.



... show the value labels in the Data Window

Click on 

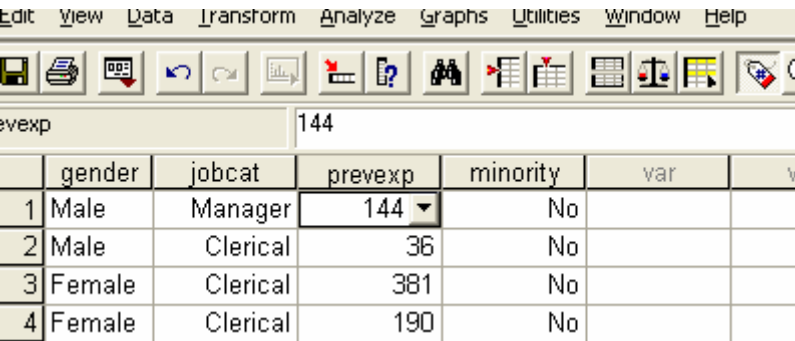
Labels off:



The screenshot shows the SPSS Data Window with the 'Labels off' option. The menu bar includes Edit, View, Data, Transform, Analyze, Graphs, Utilities, Window, and Help. The toolbar contains various icons. The data window title is 'prevexp' and it shows a summary of 144 cases. The data table has columns for gender, jobcat, prevexp, minority, var, and va. The data rows are:

	gender	jobcat	prevexp	minority	var	va
1	m	3	144	0		
2	m	1	36	0		
3	f	1	381	0		
4	f	1	190	0		

Labels on:



The screenshot shows the SPSS Data Window with the 'Labels on' option. The menu bar and toolbar are the same as in the previous screenshot. The data window title is 'prevexp' and it shows a summary of 144 cases. The data table has columns for gender, jobcat, prevexp, minority, var, and v. The data rows are:

	gender	jobcat	prevexp	minority	var	v
1	Male	Manager	144	No		
2	Male	Clerical	36	No		
3	Female	Clerical	381	No		
4	Female	Clerical	190	No		

... list the variables and the variable labels

display labels.

File Information

List of variables on the working file

Name (Position) Label

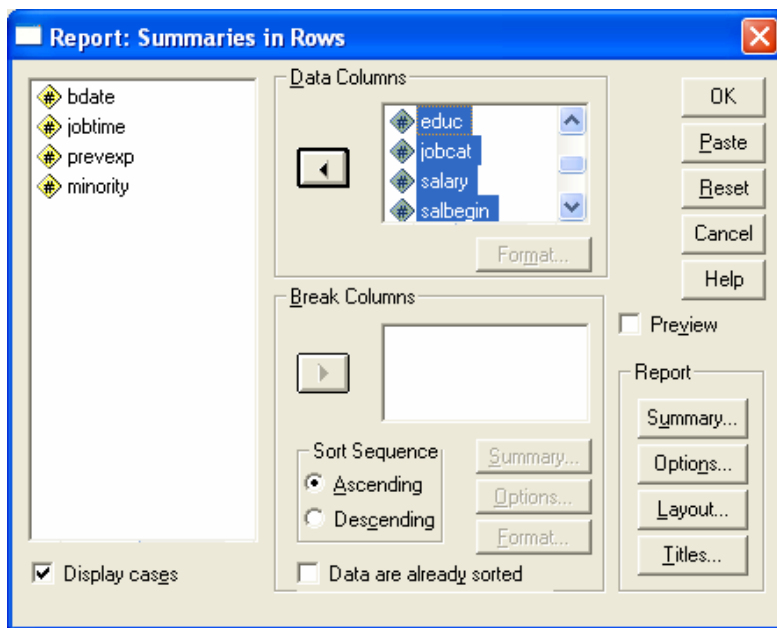
id (1) Employee Code
gender (2) Gender
bdate (3) Date of Birth
educ (4) Educational Level (years)
jobcat (5) Employment Category
salary (6) Current Salary
salbegin (7) Beginning Salary
jobtime (8) Months since Hire
prevexp (9) Previous Experience (months)
minority (10) Minority Classification

... list the values of selected variables for cases in the file

list vars=id gender educ jobcat salary salbegin.

id	gender	educ	jobcat	salary	salbegin
1	m	15	3	\$57,000	\$27,000
2	m	16	1	\$40,200	\$18,750
3	f	12	1	\$21,450	\$12,000
4	f	8	1	\$21,900	\$13,200
5	m	15	1	\$45,000	\$21,000
6	m	15	1	\$32,100	\$13,500
7	m	15	1	\$36,000	\$18,750

Analyze/Reports/Report Summaries in Rows

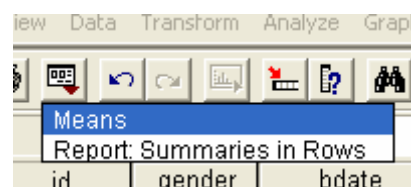


Report

Employee Code	Gender	Educational Level (years)	Employment Category	Current Salary	Beginning Salary
1	m	15	3	\$57,000	\$27,000
2	m	16	1	\$40,200	\$18,750
3	f	12	1	\$21,450	\$12,000
4	f	8	1	\$21,900	\$13,200
5	m	15	1	\$45,000	\$21,000
6	m	15	1	\$32,100	\$13,500
7	m	15	1	\$36,000	\$18,750

... recall point and click commands

Click on  and select from the list:



... remove unnecessary information from output tables

Double-click on table:

Correlations

		educ Educational Level (years)	salary Current Salary	salbegin Beginning Salary
educ Educational Level (years)	Pearson Correlation	1	.661**	.633**
	Sig. (2-tailed)		.000	.000
	N	474	474	474
salary Current Salary	Pearson Correlation	.661**	1	.880**
	Sig. (2-tailed)	.000		.000
	N	474	474	474
salbegin Beginning Salary	Pearson Correlation	.633**	.880**	1
	Sig. (2-tailed)	.000	.000	
	N	474	474	474

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

Right-mouse click on one of the Ns, select Select, then *Data cells and labels*. Press the Delete button.

Correlations

		educ Educational Level (years)	salary Current Salary	salbegin Beginning Salary
educ Educational Level (years)	Pearson Correlation	1	.661**	.633**
	Sig. (2-tailed)		.000	.000
salary Current Salary	Pearson Correlation	.661**	1	.880**
	Sig. (2-tailed)	.000		.000
salbegin Beginning Salary	Pearson Correlation	.633**	.880**	1
	Sig. (2-tailed)	.000	.000	

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

Do the same for the significance line, delete the Pearson correlation labels, edit the variable names and move the vertical lines:

Correlations

	educ Educational Level (years)	salary Current Salary	salbegin Beginning Salary
Educational Level	1	.661**	.633**
Current Salary	.661**	1	.880**
Beginning Salary	.633**	.880**	1

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

... combine information from different cases

```
aggregate out=*/  
break=school/  
mathmean=mean(mathach)/  
n=n(school)/  
mathsd=sd(mathach).
```

Point-and-click: *Data/Aggregate*

... and add the combined information to the original cases

```
match files file='c:\writing\newdoc\new06\863\schools.sav'/  
table='c:\writing\newdoc\new06\863\schools_agg.sav'/  
by school.  
execute.
```

Point-and-click: *Data/Merge Files/Add Variables*

... convert variables into cases

```
varstocases make anxiety from anx1 anx2 anx3/  
index=time(3)/  
keep=subject group.
```

Point-and-click: *Data/Restructure/Restructure selected variables into cases*

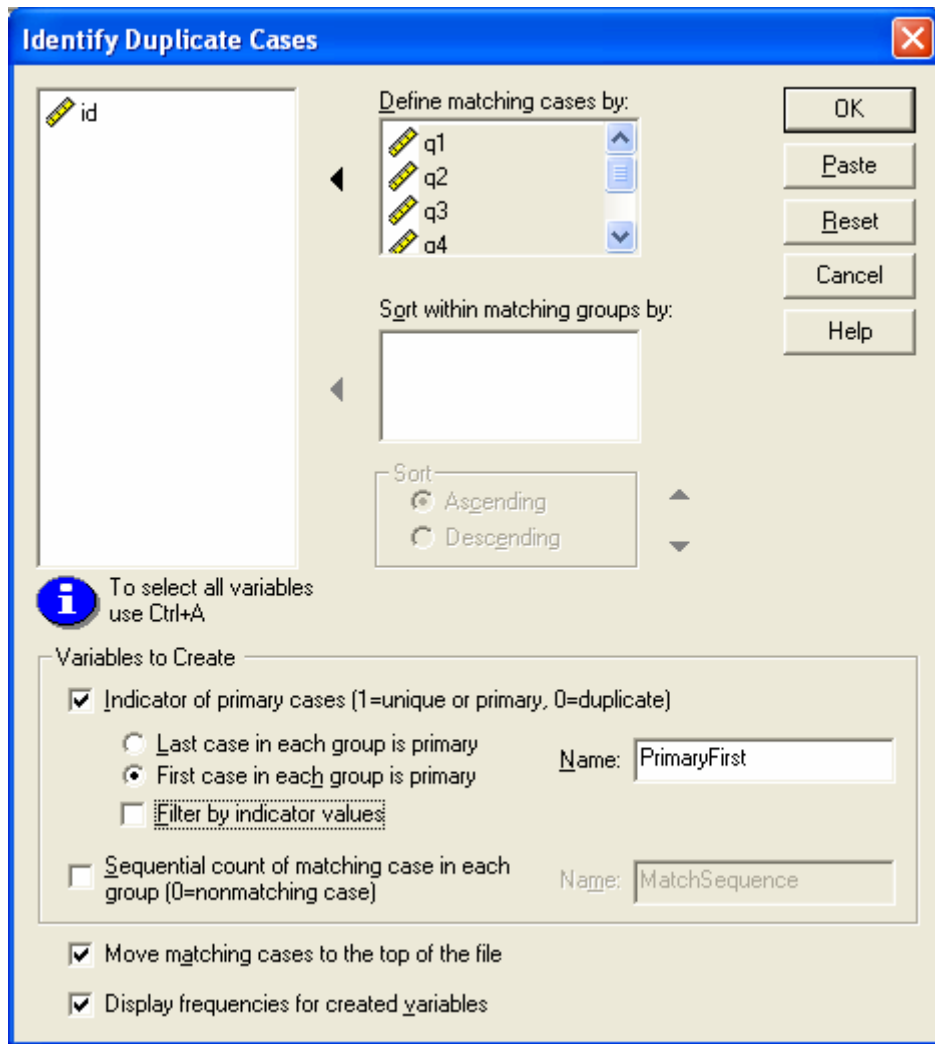
... and cases into variables

```
casestovars id=subject/  
fixed=group/  
drop=time.
```

Point-and-click: *Data/Restructure/Restructure selected cases into variables*

... see if there are duplicate cases

Data/Identify Duplicate Cases

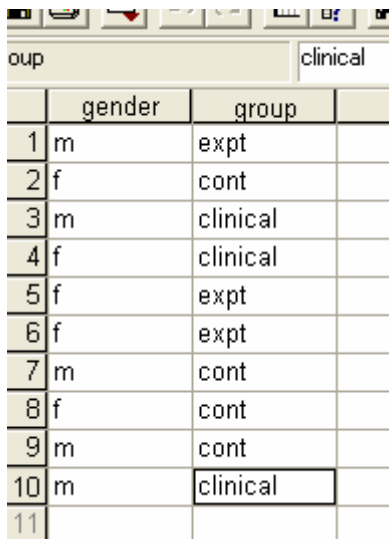


PrimaryFirst Indicator of each first matching case as Primary

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	0 Duplicate Case	1	10.0	10.0	10.0
	1 Primary Case	9	90.0	90.0	100.0
	Total	10	100.0	100.0	

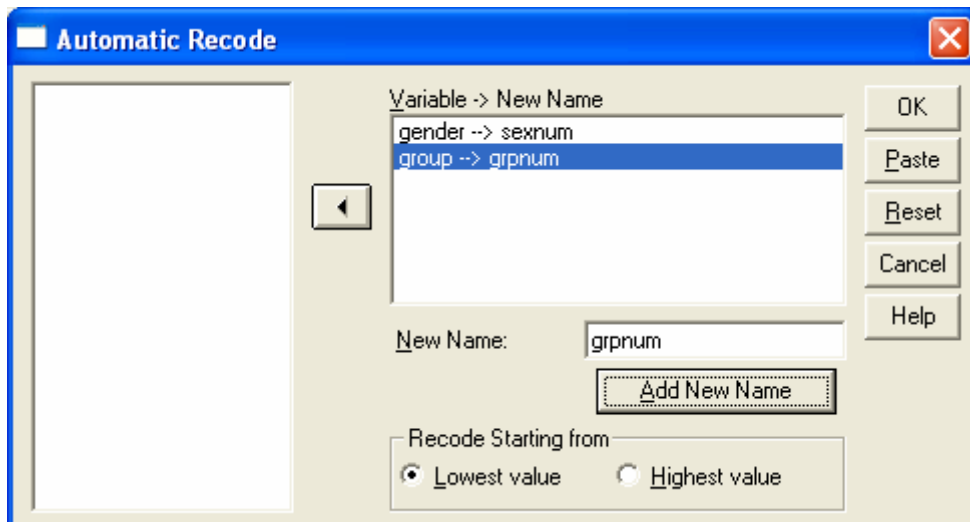
	id	q1	q2	q3	q4	q5	PrimaryFirst
1	4	1	3	4	3	3	1
2	5	2	4	6	6	2	1
3	6	3	5	7	5	8	1
4	1	3	7	5	3	7	1
5	8	4	1	4	2	5	1
6	2	4	8	3	4	5	1
7	7	4	9	5	3	7	1
8	10	4	9	5	3	7	0
9	3	5	2	2	2	4	1
10	9	7	0	1	6	3	1
11							

... convert string variables to numeric variables



	gender	group	
1	m	expt	
2	f	cont	
3	m	clinical	
4	f	clinical	
5	f	expt	
6	f	expt	
7	m	cont	
8	f	cont	
9	m	cont	
10	m	clinical	
11			

Transform/Automatic Recode

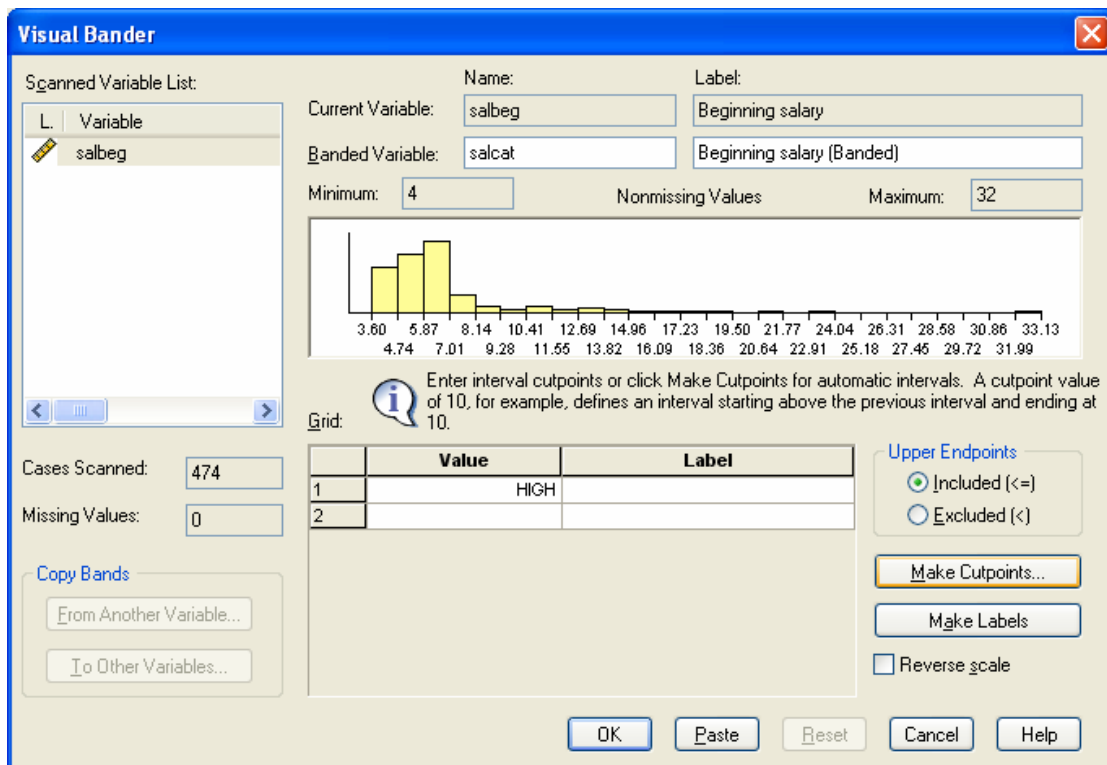
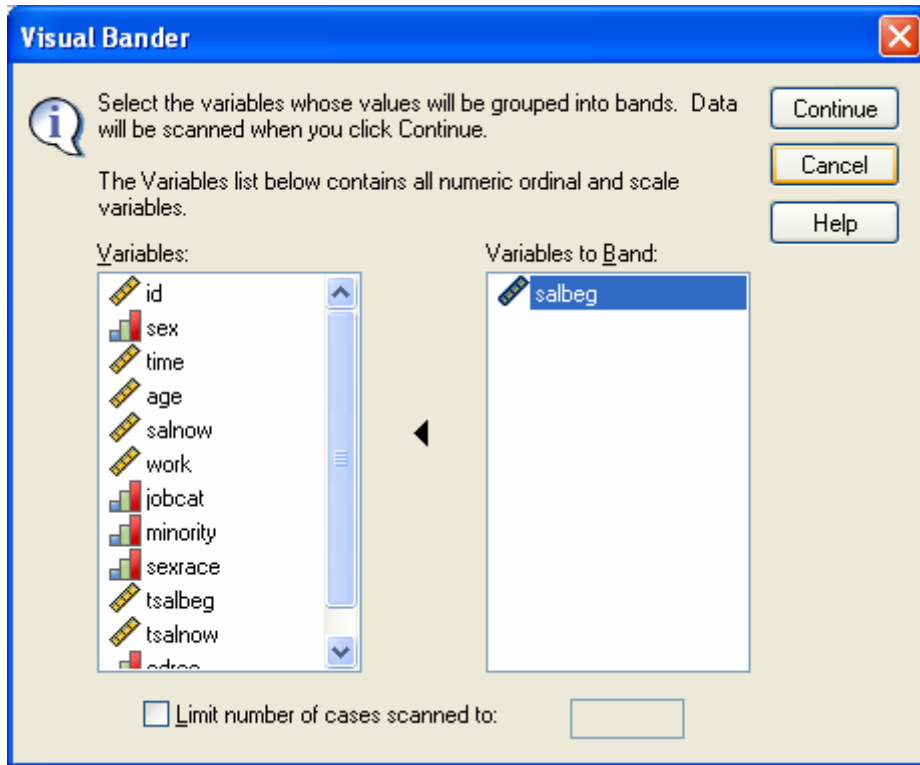


```
AUTORECODE
  VARIABLES=gender group /INTO sexnum grpnum
  /PRINT.
gender into sexnum
Old Value  New Value  Value Label
f           1         f
m           2         m

group into grpnum
Old Value  New Value  Value Label
clinical   1         clinical
cont       2         cont
expt       3         expt
```

... convert numeric variables to categorical

Transform/Visual Bander



Make Cutpoints

Equal Width Intervals

Intervals - fill in at least two fields

First Cutpoint Location:

Number of Cutpoints:

Width:

Last Cutpoint Location:

Equal Percentiles Based on Scanned Cases

Intervals - fill in either field

Number of Cutpoints:

Width(%):

Cutpoints at Mean and Selected Standard Deviations Based on Scanned Cases

+/- 1 Std. Deviation

+/- 2 Std. Deviation

+/- 3 Std. Deviation

Apply will replace the current cutpoint definitions with this specification.
A final interval will include all remaining values: N cutpoints produce N+1 intervals.

Apply Cancel Help

salcat Beginning salary (Banded)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	119	25.1	25.1	25.1
	2	145	30.6	30.6	55.7
	3	92	19.4	19.4	75.1
	4	118	24.9	24.9	100.0
	Total	474	100.0	100.0	

... save output as an SPSS or Excel dataset

```
oms select tables /  
  if commands=['T-Test']  
  subtypes =['Group Statistics' 'Independent Samples Test']/  
  destination format=sav outfile='c:\writing\newdoc\new06\863\t-test.sav'.
```

```
t-test groups=minority(0,1) vars=edlevel age.
```

```
omsend.
```

... carry out the same analysis for a number of different variables

```
define glm1 (!pos !token (1)/!pos !token (1)/!pos !token (1)).
```

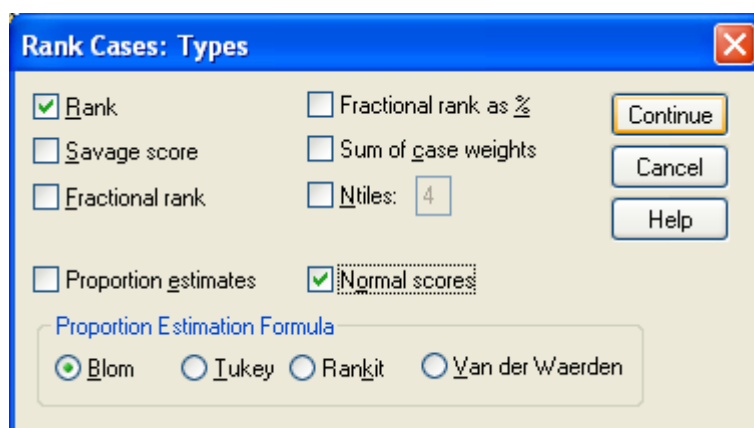
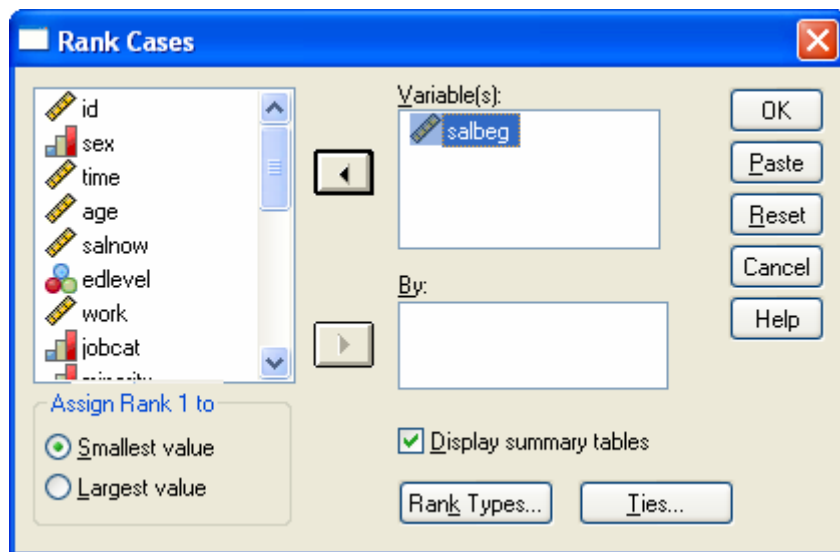
```
glm !1 by !2 with !3/  
  print=parameters/  
  design=!3 !2 !2 * !3.
```

```
!enddefine.
```

```
glm1 salnow sex salbeg.  
glm1 salnow minority edlevel.
```

... rank cases

Transform/Rank Cases



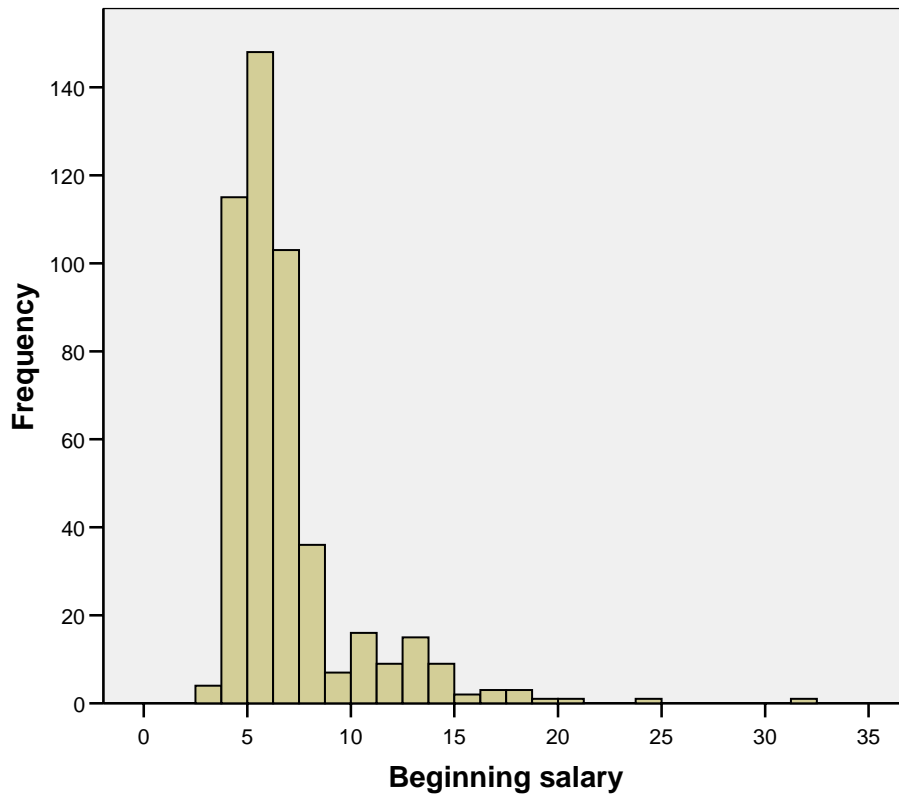
Created Variables(b)

Source Variable	Function	New Variable	Label
salbeg(a)	Normal Score	Nsalbeg	Normal Score of salbeg using Blom's Formula
	Rank	Rsalbeg	Rank of salbeg

a Ranks are in ascending order.

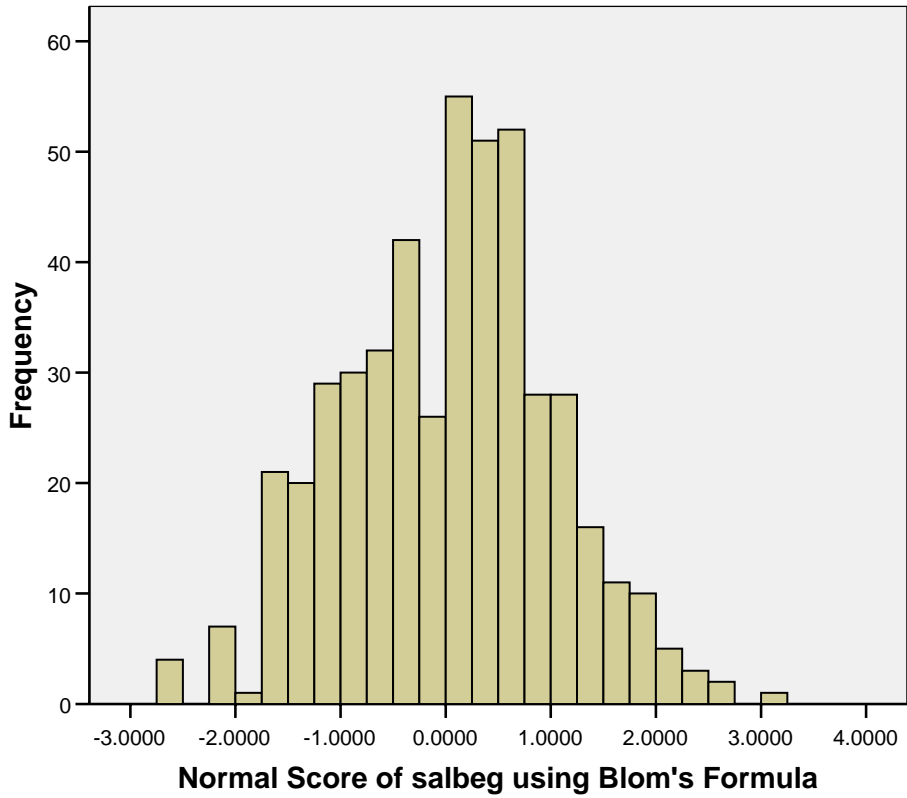
b Mean rank of tied values is used for ties.

Beginning salary



Mean =6.81
Std. Dev. =3.148
N =474

Normal Score of salbeg using Blom's Formula



Mean =0.001394
 Std. Dev. =0.9920659
 N =474

... read in data from a contingency table

sex Sex of employee * minority Minority classification
Crosstabulation

		minority Minority classification		Total
		0 White	1 Nonwhite	
sex Sex of	0 Males	194	64	258
employee	1 Females	176	40	216
Total		370	104	474

data list list/

sex minority count.

begin data.

0 0 194

0 1 64

1 0 176

1 1 40
end data.

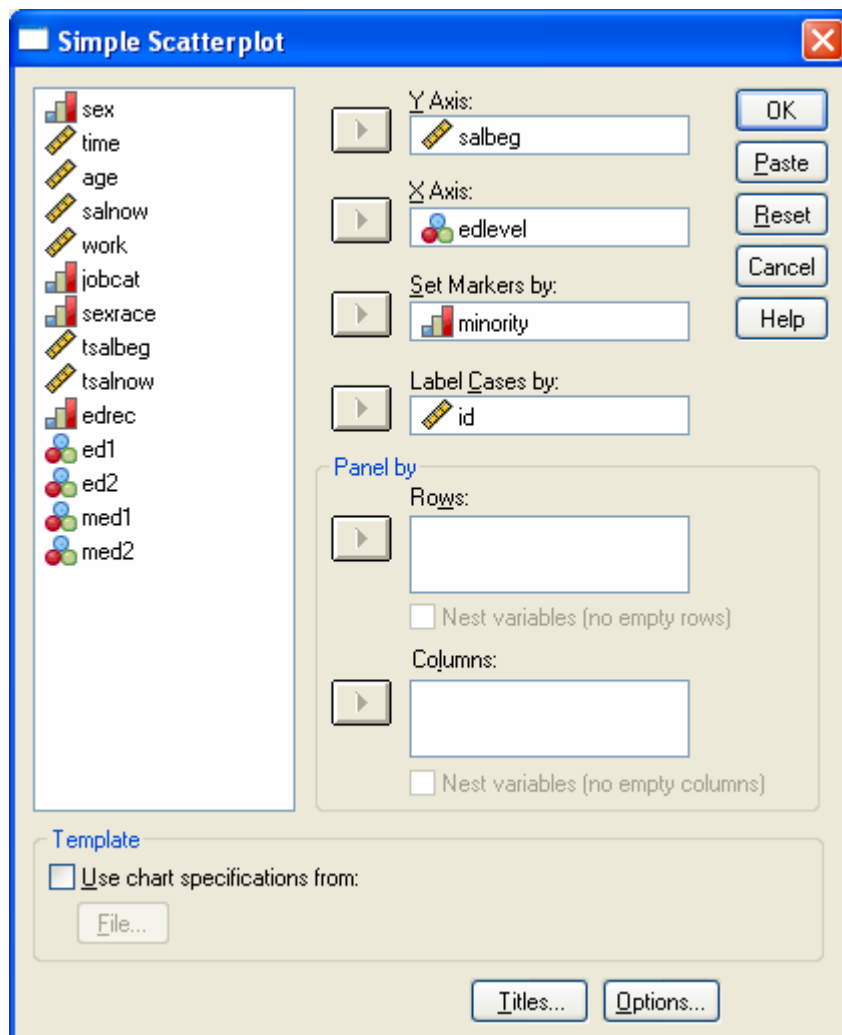
value labels sex 0 'Males' 1 'Females'/minority 0 'White' 1 'Non-white'.
print format sex minority (f1).

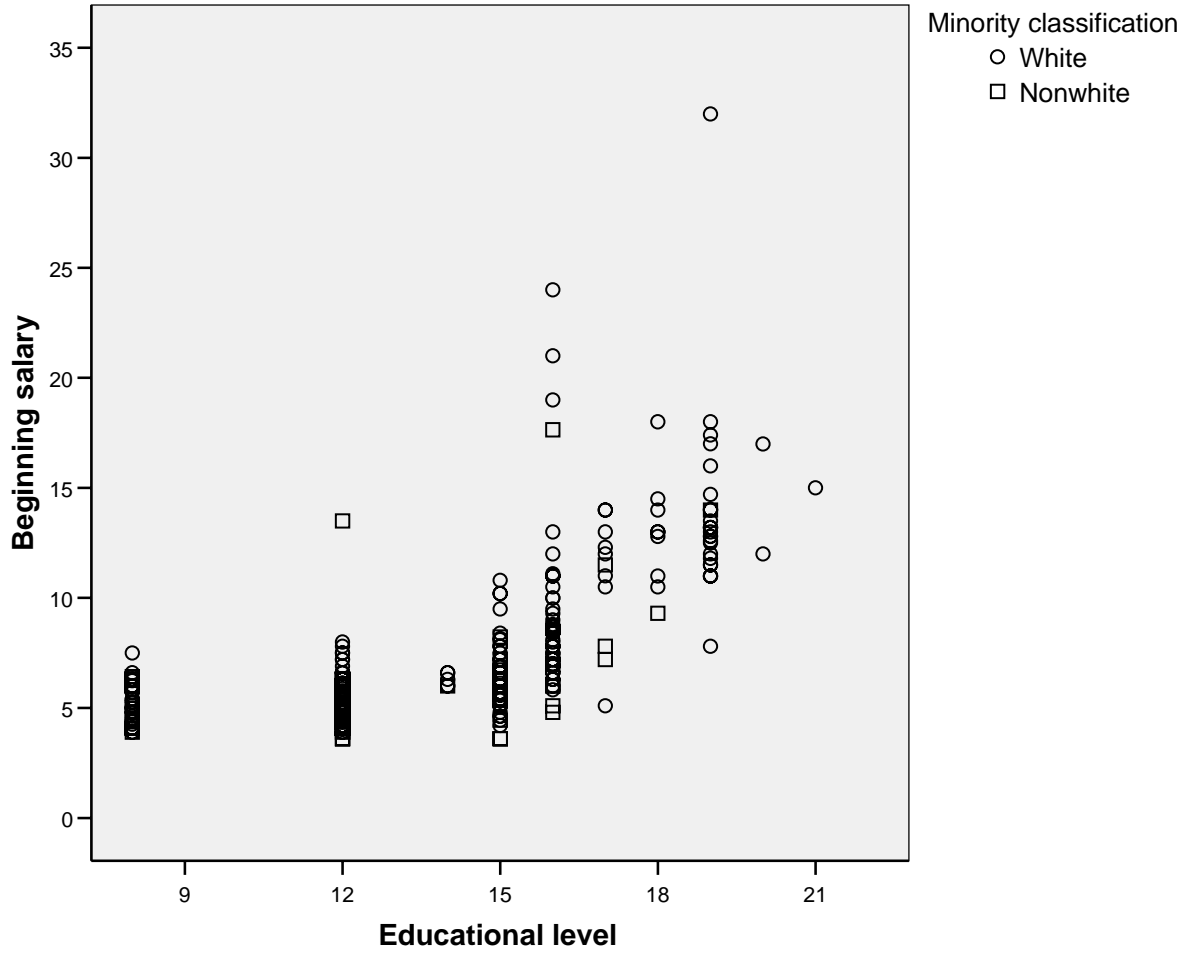
weight by count.

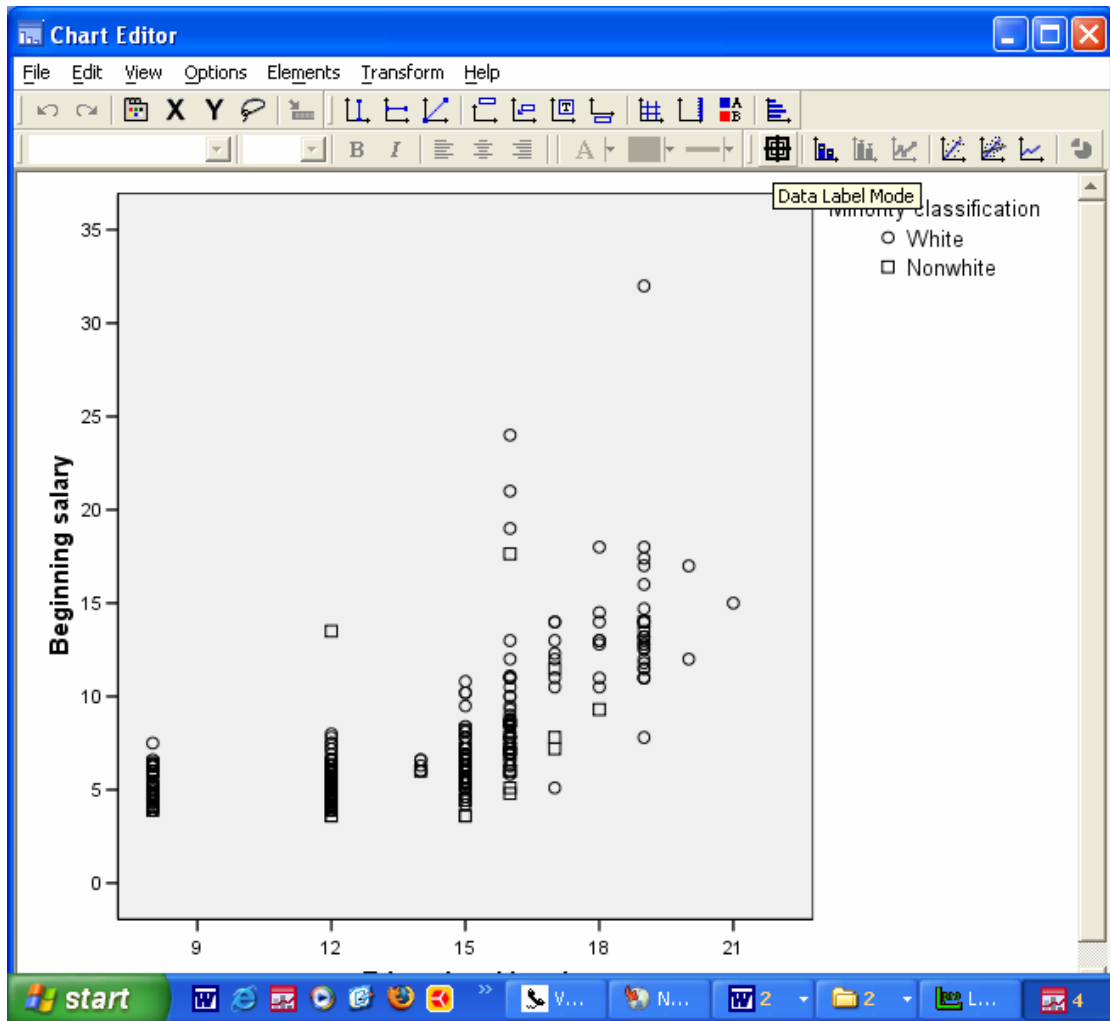
crosstabs sex by minority/
cells=count row/
statistics=chisq.

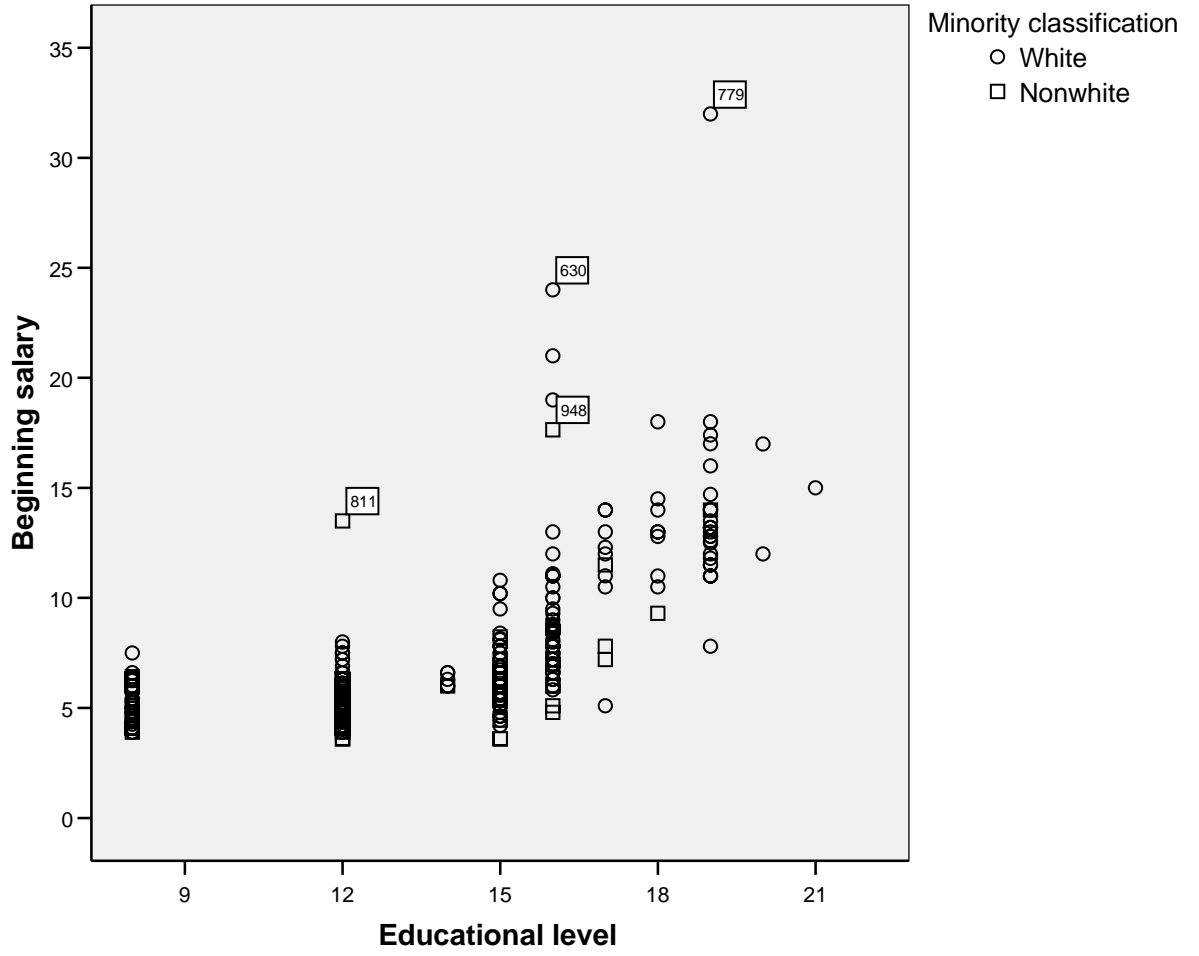
**... scatterplot with different markers for different groups, and
identification of individual points**

Graphs/Scatter-Dot/Simple Scatter









Alan Taylor
Department of Psychology
14-03-06