

# **Introduction to SPSS for Windows Version 12**

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<b>I. OBJECTIVES</b>	<b>2</b>
<b>II. QUESTIONNAIRE ANALYSIS &amp; DATA ENTRY</b>	<b>2</b>
A. Questionnaire Design for Easy Data Analysis	2
B. Types of Questions beyond our scope today	2
C. Pre- and Post-coding	2
D. The Example questionnaire	2
E. The Codebook	4
<b>III. HANDS-ON SESSION I</b>	<b>5</b>
A. Start SPSS for Windows	5
B. The Screen on Entry	5
C. Defining a variable (What to do now!)	7
D. Data Entry	9
<b>IV. HANDS ON SESSION II ANALYSIS AND TRANSFORMATION</b>	<b>10</b>
A. Sort and List	10
B. FREQUENCIES	11
C. DATA TRANSFORMATIONS	12
D. Tables	14
E. Graphs	21
F. Statistics	24
<b>V. FURTHER INFORMATION</b>	<b>25</b>
A. SPSS documentation:	25
B. SPSS for Windows Advice	26
C. Other SPSS Platforms	26
D. Availability	26

## E. Citing SPSS

26

I. Objectives

This course introduces SPSS for Windows through the stages required to enter and analyse a simple questionnaire. The course will introduce the major features of the SPSS for Windows user interface. The questionnaire codebook will be entered in the variable view and the data will be entered in the data view. Then the answers of all participants to the questionnaire will be analysed. The Output Navigator will be introduced for organising and sorting the results.

II. Questionnaire Analysis & Data Entry

This first part of the session covers the process of questionnaire design and preparation for data analysis, and then overviews the stages of Questionnaire Design and Questionnaire entry.

A. Questionnaire Design for Easy Data Analysis

Code your questions (either before or after interviewing). Make sure the codes on the questionnaire correspond to the codes you input.

For this training session use the questionnaire on page 3. There is a corresponding codebook on page 4.

(This is much easier if you use SNAP, a package for simple questionnaire design and analysis that can export SPSS Save files. This package is available, in Stenhouse 3.17/3.19 – apply to Dr Tagg for documentation.)

B. Types of Questions beyond our scope today

Ratings: Such questions require more statistics than we can cover today (Reliability, Factor, etc). However we will use the same sort of statistics with the 'averageable' questions (q2, q3)

Rankings: Such questions are difficult for expert statisticians, especially if you allow tied ranks, omissions, etc. Stick to ratings! Remember you can easily interpret the relative position of different factors in a 'tick all that apply question' such as Q4. I believe that most researchers only want to be able to interpret the ranks of items in a table representing the sample results.

C. Pre- and Post-coding

If you can't "close" your open questions when you are designing your questionnaire, try to do it before you enter your data. At least create a variable differentiating those who gave a reply from those who didn't; this can be remarkably informative; otherwise you could code with qualitative, theoretically derived coding schemes.

D. The Example questionnaire

Fill it in so that you can enter your responses, along with all the other class participants to generate some data to analyse in the second half of this session. (This questionnaire was produced in SNAP)

- Q1 Name (Surname, Initials) \_\_\_\_\_
- Q2 Have you had any formal training in statistics?  
If so, how many semesters worth of training? \_\_\_\_\_
- Q3 Have you had any training in Questionnaire Design? If so how many semesters  
worth of training? \_\_\_\_\_
- Q4 Which Faculty are you from
- |             |                          |   |
|-------------|--------------------------|---|
| Arts        | <input type="checkbox"/> | 1 |
| Business    | <input type="checkbox"/> | 2 |
| Science     | <input type="checkbox"/> | 3 |
| Engineering | <input type="checkbox"/> | 4 |
| Education   | <input type="checkbox"/> | 5 |
| Other       | <input type="checkbox"/> | 6 |
- Q5 Which Status are you?
- |                       |                          |   |
|-----------------------|--------------------------|---|
| Lecturer              | <input type="checkbox"/> | 1 |
| Research              | <input type="checkbox"/> | 2 |
| Doctoral Researcher   | <input type="checkbox"/> | 3 |
| Masters Student       | <input type="checkbox"/> | 4 |
| Undergraduate Student | <input type="checkbox"/> | 5 |
| Other                 | <input type="checkbox"/> | 6 |
- Q6 Record your gender
- |        |                          |   |
|--------|--------------------------|---|
| Female | <input type="checkbox"/> | 1 |
| Male   | <input type="checkbox"/> | 2 |
- Q7 Which of the following types of software have you ever used?
- |  |                          |
|--|--------------------------|
| Spreadsheet (Excel)                        | <input type="checkbox"/> |
| Wordprocessing (Word)                      | <input type="checkbox"/> |
| Programming Language (C, Java)             | <input type="checkbox"/> |
| Statistical Software (SPSS, MINITAB, SNAP) | <input type="checkbox"/> |

### E. The Codebook

Variable Name	Type	Width	Variable Label	Code labels and values	Measure
Q1	String	20	Name (Surname, Initials)		Nominal
Q2	Numeric	6	# Semesters training in Statistics		Scale
Q3	Numeric	6	# Semesters Questionnaire Design Methodology		Scale
Q4	Numeric	6	Which Faculty are you from	Arts 1 Business 2 Science 3 Engineering 4 Education 5 Other 6	Ordinal
Q5	Numeric	6	What Status are you?	Lecturer 1 Other Staff 2 Doct. Res. 3 PG Student 4 UG Student 5 Other 6	Ordinal
Q6	Numeric	6	Which gender are you?	Female 1 Male 2	Ordinal
Q7p1	Numeric	6	Have you ever used a Spreadsheet	Used 1 Never Used 2	Ordinal
Q7p2	Numeric	6	Have you ever used a Word Processor	As above	Ordinal
Q7p3	Numeric	6	Have you ever used a Programming language	As above	Ordinal
Q7p4	Numeric	6	Have you ever used any Statistical Software	As above	Ordinal

The Codebook shows the information in the Questionnaire in such a way that SPSS can deal with them. Having a Codebook and using numerical codes for responses makes data entry an easier task.

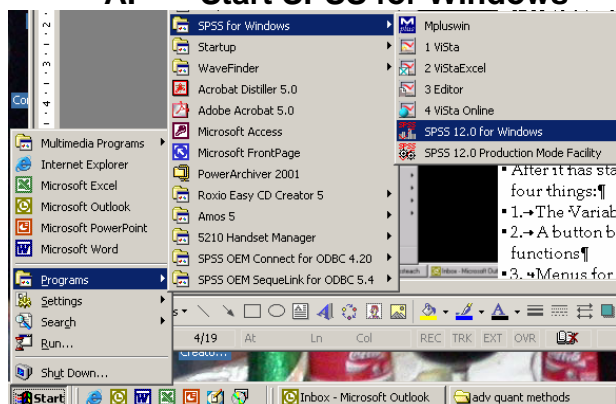
Each normal question should have a **variable name**. When you enter your codebook information into the variable window, please use these names so that the data files can be merged. Other details apart from variable names are optional. I suggest simple question numbers, as q5, for variable names. You can use the complete question wording for the **variable label**. The codes and code labels are input as **value labels**. **Measure** indicates the level of measurement.

You could add a missing values column to the form, to allow 'strict rectangular form': in other words **every case must have some value on every variable**. So if there is any reason why you don't have a sensible value for a variable, you should code them with missing values for Not Applicable, Refused, or Not Asked as appropriate. In this example you can use Blank, which is missing, for numerical type variables.

### III. Hands-on session I

This describes what to do in a hands-on session where we start SPSS for Windows, define the variables and then enter data.

#### A. Start SPSS for Windows



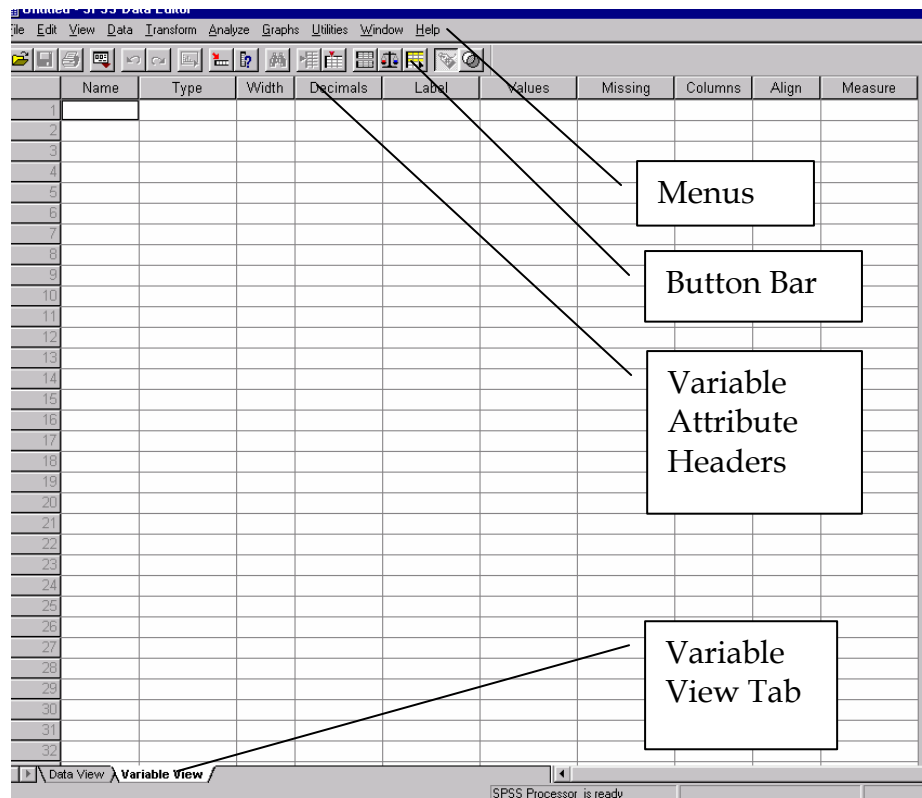
Typically SPSS is installed on the Start Menu, either as above or under the Programs Section. SPSS 12.0 for Windows is the one you want. You don't want to select the production facility.

You should then end up with the initial state shown on the foot of the page. I have superimposed labels on this image of the screen, to show you the key areas of the screen

#### B. The Screen on Entry

After it has started, SPSS for Windows shows you four things:

1. The Variable view Window, labelled Untitled.
  2. A button bar for quick access to well used functions
  3. Menus for Commands and Help
  4. A series of headers corresponding to the codebook columns (and more).
- Before you enter data in the data view, you should enter the variables: each variable is a row in the variable view.



**1. How to get things to happen in SPSS**

Mouse Clicks can get things started for some actions.

The pull-down Menus along the top give you access to a large proportion of SPSS actions. However some facilities are only available by running them from a syntax window (not covered in this session).

**2. Help and how to use it**

If you press the <F1> button you will get the help topics. If you use the Help menu it has the following topics:

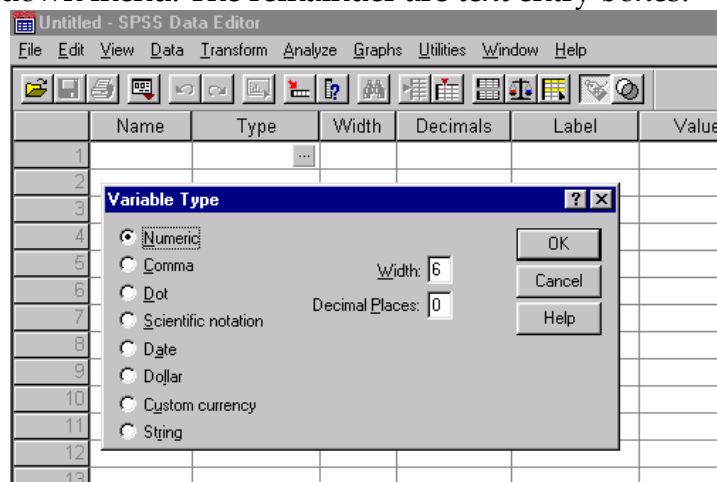
Topics	As <F1> all commands and functions in the Help Topics
Tutorial	Introduces how to use SPSS – for when you’ve forgotten what we did in this session
SPSS home page	Starts off your Internet Browser, pointing at SPSS’s home page
Statistics Coach	Helps you choose which item you should be using from the statistics and graphs menus
Ask me	Into the help topics with an english language interface
About SPSS	Tells you the version you’re using
Register Product	Fill in a form for SPSS marketing department (!)

### C. Defining a variable (What to do now!)

In the variable view you can enter for each of the variables each of the following attributes:

Name	Values*
Type*	Missing*
Width+	Columns+
Decimals+	Align@
Variable Label	Measure@

Those with the asterisk (\*) have windows that come up when you click the grey box with three dots in it. Those with the plus sign (+) have number entries with up and down arrows. Those with the 'at' sign (@) have a pull-down menu. The remainder are text entry boxes.

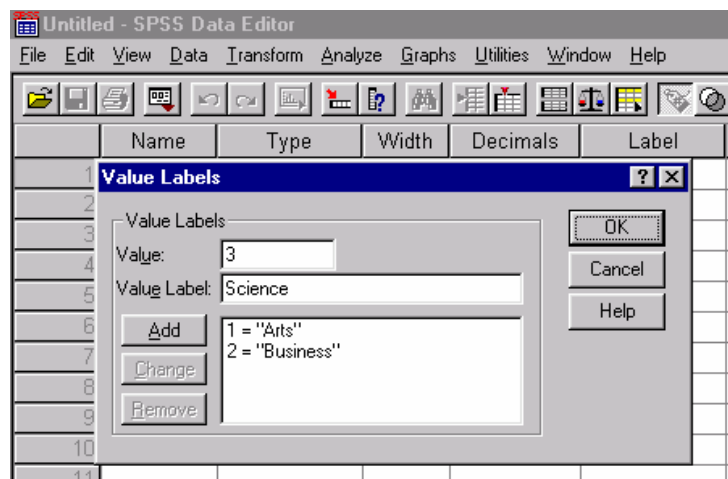


You want to enter the variable name as in the Codebook. This is the minimum required. You can then any other of the variable details. We need to change the Type of variable Q1 to a string and make its width 20. Here's what the window for changing Variable type looks like.

Once you've changed it and clicked the OK box, you go back to the Variable window where you can change other properties. Remember you are only entering the questionnaire at the moment, and not entering any responses or data.

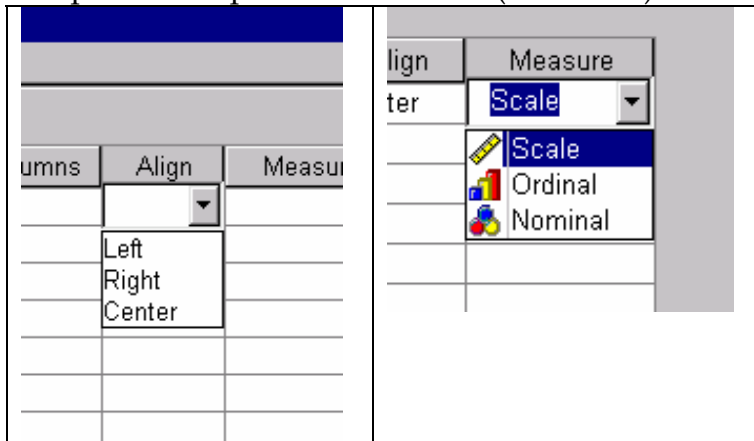
Q2 (and the rest) is a numeric variable, but it does not have any category labels. You'll need to fill in the labels cell to identify q2.

Q3 is the same type of variable, so you don't need to do anything different. Q4 on the other hand is a coded variable and is worth putting in Value labels. You do this in the labels window by putting in a value, a label and then hitting the ADD button. If you hit the CONTINUE button a warning message comes up. Just ADD until you've entered all the values and labels.



All the other variables are variants of the above.

Align and Measure both involve pull-down boxes. You can also work out the Measure level of each variable with the help of the “Define Variable Properties” step of custom tables (see below).



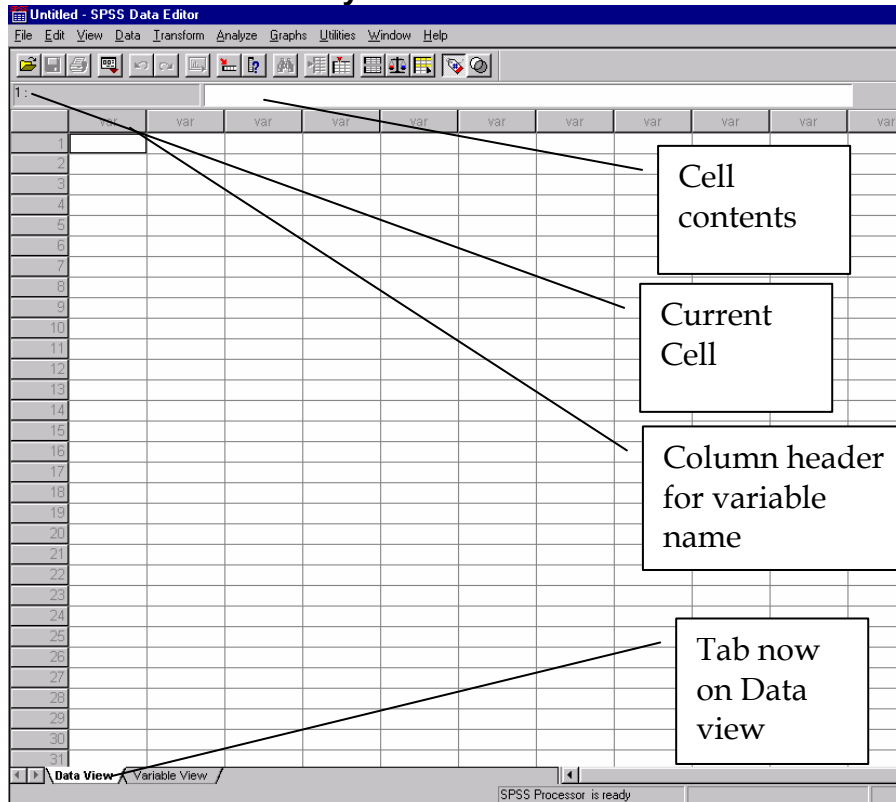
**1. Applying the same value labels to a series of variables**

To apply the same labels for all four parts of Q7, first you should give the variables Q7p1 to q7p4 names and variable labels in the normal way. Then simply copy the cell with all the values from one variable to the other cells. You can't drag and drop in SPSS, simply use Ctrl-C and Ctrl-V or the Edit menu.

When you have finished the variables view should look like this, not that far from the original codebook.

	Name	Type	Width	Decimals	Label	Values	Missing	Columns	Align	Measure
1	q1	String	20	0	Name	None	None	20	Left	Nominal
2	q2	Numeric	6	0	# terms statistics	None	None	8	Right	Scale
3	q3	Numeric	6	0	# terms quest design methods	None	None	8	Right	Scale
4	q4	Numeric	6	0	Which Faculty are you from	{1, Arts}...	None	8	Right	Ordinal
5	q5	Numeric	6	0	Which Status are you	{1, Lecturer}...	None	8	Right	Ordinal
6	q6	Numeric	6	0	Sex	{1, Female}...	None	8	Right	Ordinal
7	q7p1	Numeric	6	0	ever used a spreadsheet	{1, Used}...	None	8	Right	Ordinal
8	q7p2	Numeric	6	0	Ever used a Word Processor	{1, Used}...	None	8	Right	Ordinal
9	q7p3	Numeric	6	0	Programming Language	{1, Used}...	None	8	Right	Ordinal
10	q7p4	Numeric	6	0	Statistical Software	{1, Used}...	None	8	Right	Ordinal
11										
12										
13										

## D. Data Entry



Once you have entered all the codebook information, you can enter data.

Click on the data view tab

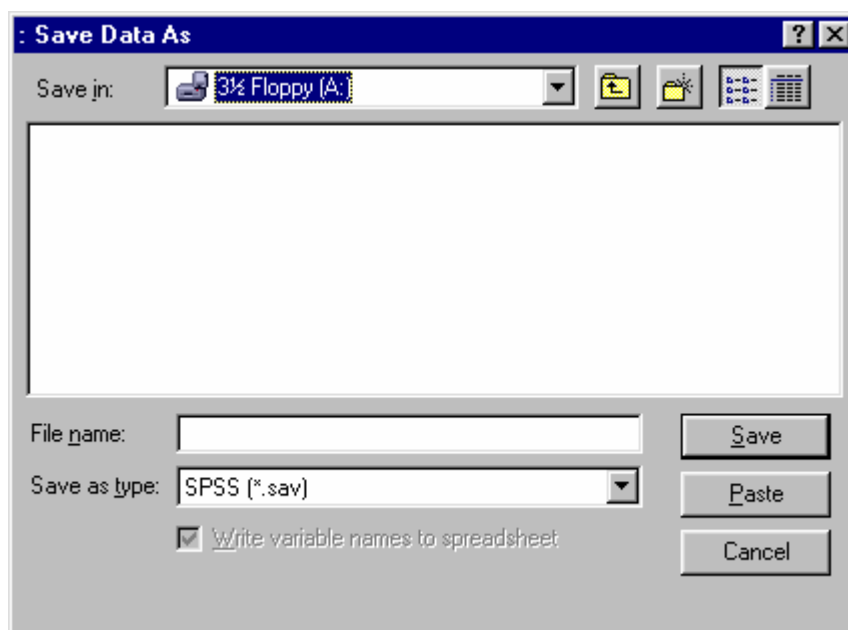
You can simply add the single row of data to represent your questionnaire responses in the data view, as if you were in a spreadsheet. Note that SPSS can display variable values as their value label (There is a Utilities menu switch called value labels; you can also use the button bar icon with a label on it!)

Until something is entered the cells have a full stop in them for missing values. Skip over the cells for any unanswered. Use the Tab key, or Return key followed by arrows to move between cells. Once you have entered the single row, you need to save the SPSS file.

While you have a break, I will merge the files for the analyses in the second part of the session, possibly with ones from previous sessions.

### 1. Saving Files

To save a file you use the file menu and save, while you are in the Data editor window. Give your file a name on the A: drive so the disks can be collated between machines. Here is how it should look when you have changed the 'Save in' location to your disk on the A: drive. Next type a name for your file into the file name box. Then hit the Save button to save. Make sure your disk has finished whirring before you take it out and give it in!



## 2. Alternative data entry procedures in SPSS

- Use a spreadsheet like Excel and put variable names on the first line: or use a database: then use the open data file options to select the appropriate file type - remember to click the read variable names box. You can read more recent Excel spreadsheets via the rather complicated Get ODBC function.
- Use an editor external to SPSS (Word can save in text-only mode). Then use the Read ASCII data command on the File Menu.
- Design your questionnaire and enter data in SNAP, then save in SPSS format.
- Sub-contract to a company (I recommend Advanced Data Services Tel: 0141 550 3408) to produce an ASCII file

## IV. Hands on Session II Analysis and Transformation

The Menus from Data through to Graphs provide all the things you can do once you have got data into SPSS. You can sort and list your data, do procedures on variables separately, do crosstabulations, graphs and a large number of analyses that we can't cover!

For the second session, after a few minutes to guide you through this document it's a matter of you trying any that interest you!

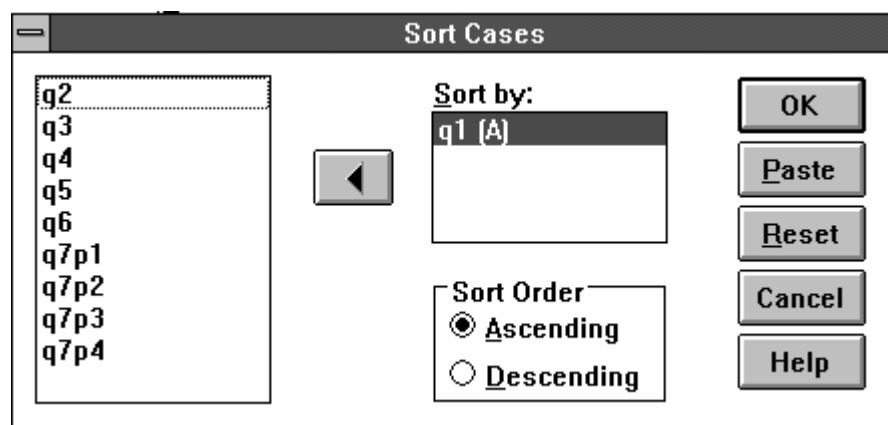
### A. Sort and List

A sorted list is one of the most obvious and basic ways of looking at your data. Some great data analysts can discover as much with this technique as by any other!

First sort the data: Sort is found Under the Data menu.

#### 1. SORT

First let us sort the data alphabetically by Name. That would involve using the variable Q1. Use the variable selection tool to pick it across.



You select the variable name from the left by clicking it, and then click the arrow in the middle (which at that point is pointing right) to move it into the Sort By list. Simply click OK and the sorting will happen. Look at the changes in the data editor window.

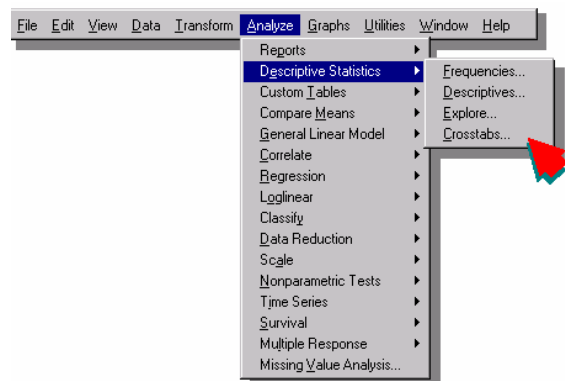
## 2. Reports

The simplest thing to do is to look at your data. You can use Print from the file menu to print it or you could use Analyze | Reports | Case Summaries. The dialog box allows you to select a sub-set of the variables or cases and make adjustments to the format.

The results from the report procedure go into the Output viewer. This is explained in more detail under frequencies.

### B. FREQUENCIES

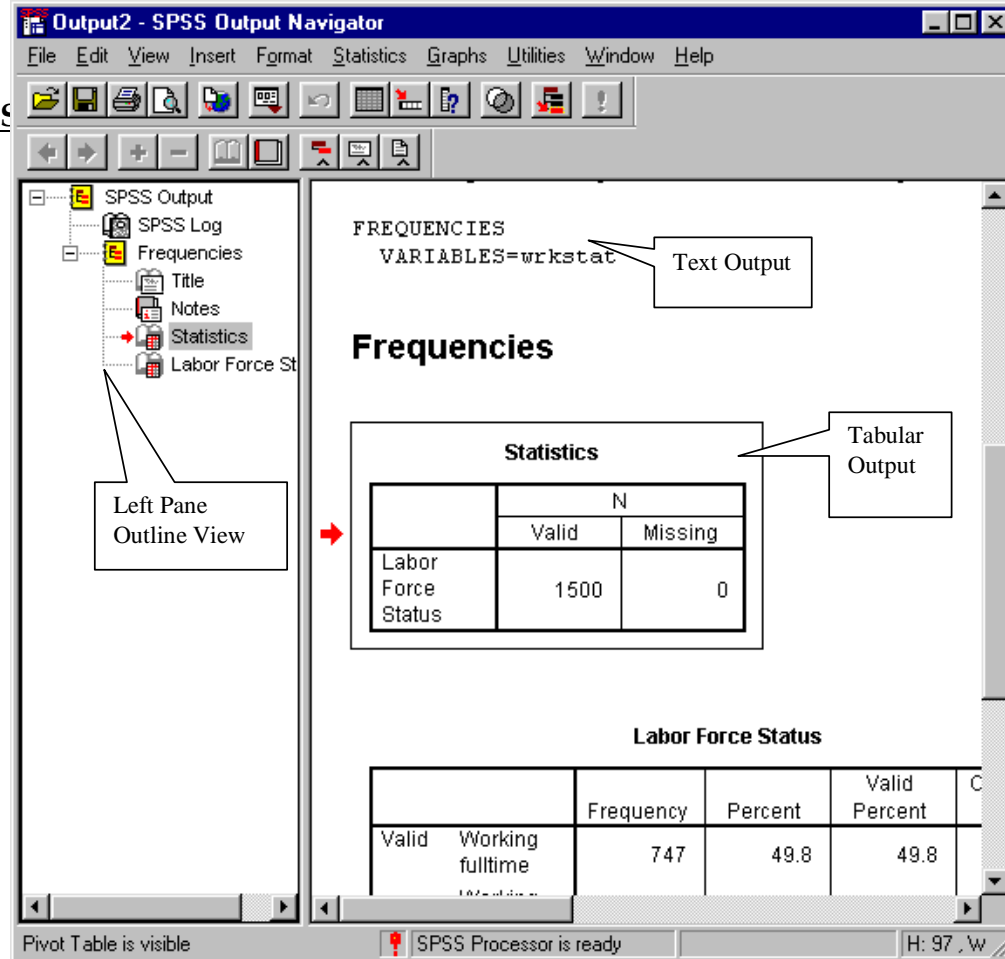
The Frequencies procedure is under Analyze | Descriptive Statistics (see tutorial screen below). Select a single variable for output, and use the Statistics and Chart branches to select statistics and a chart.



## 1. Navigator

The output from frequencies and other procedures is stored in a useful tool called the output navigator. This stores all the output in a structured fashion.

The left pane of the Navigator contains an outline view of the output contents. The right pane contains statistical tables, charts, and text output. You can use the scroll bars to browse the results. Or you can click on an item in the outline to go directly to the corresponding table or chart. You can click and drag the right border of the outline pane to change the width of the outline pane.



An open book icon next to an item in the outline pane indicates that it is currently visible in the display pane. To hide a table or chart in the display without deleting it, double-click its book icon in the outline pane. The open book icon changes to a closed book icon, indicating that the item is now hidden. For example notes is typically closed when produced by an SPSS procedure. The cell processing summary is usually worth closing one you've checked not too many cases were missing.

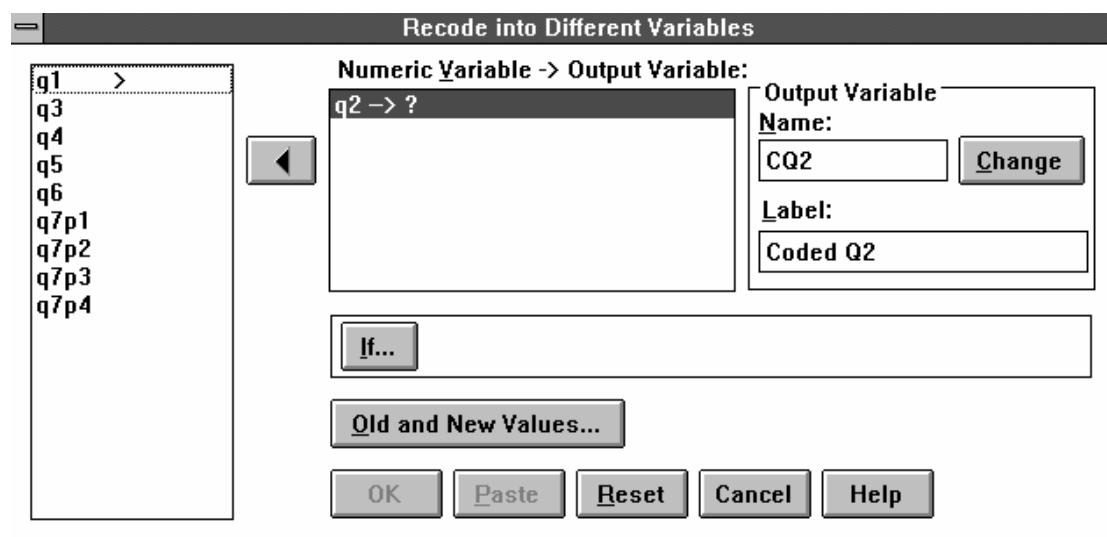
### C. DATA TRANSFORMATIONS

You can either calculate new variables with all sorts of maths and functions, or you can group together codes of existing variables. You might want to group everyone who has attended any number of terms of Statistics training into one group. This can be done with the Recode transformation.

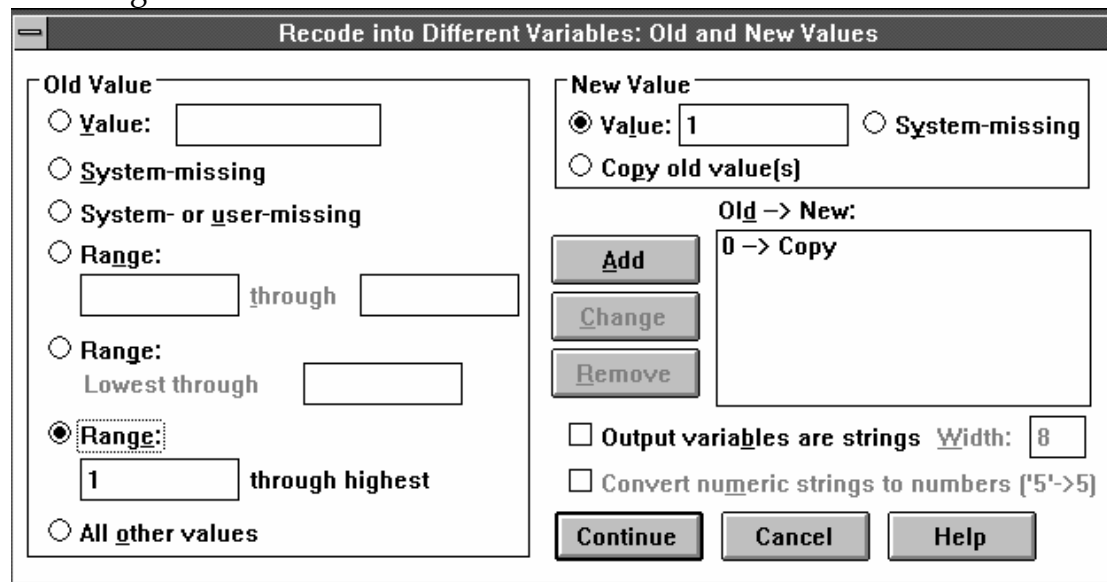
#### 1. Recode

This can be found under the Transform menu. There are two options on the sub-branch, allowing you to recode the variable on top of the existing values or to generate a new variable. I always advise the second, as it prevents the loss of the original codes.

To set up the Recode, first choose a variable from the left hand window and use the arrow key to put it into the middle. Then click in the empty window next to New Variable and type in a new variable name, perhaps CQ2 (for Coded Q2!). Hit the change button to get this value into the middle box. Then you need to select the Old and New Values box.



The sub-dialog box for Old and New Values is rather daunting, but for your Recode you want to keep zero as is and change 1 and above to be 1. Do it by following the instructions **under** the next screen.



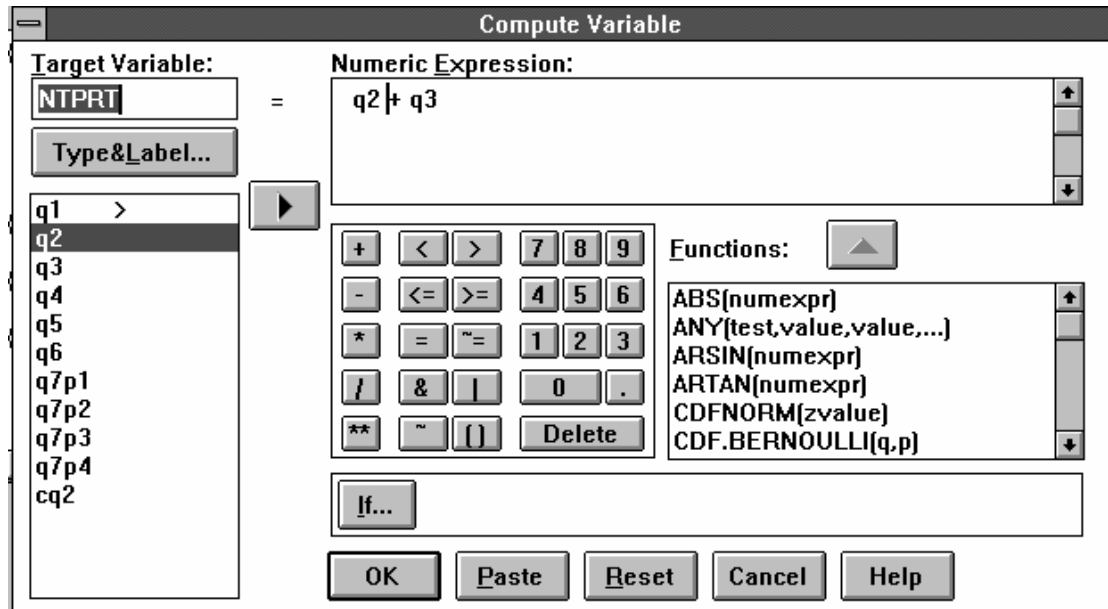
At this stage I have put in the first Old value (click the single value radio button and enter zero) and then clicked the Copy old value under New Value. Then one hits the add button and the Old & New values displays the consequent command. The second pairing is a range from 1 through highest being changed to the value 1. After this I should double click the column heading and add a value label to indicate that 0 means No training and 1 means training.

## 2. COMPUTE

Another data transformation available in the same sub-branch as Recode allows you to compute new variables by arithmetic operations. If you wanted a variable to represent the amount of relevant previous training of either type the following command would be appropriate.

```
COMPUTE NTPRT=Q2+Q3
```

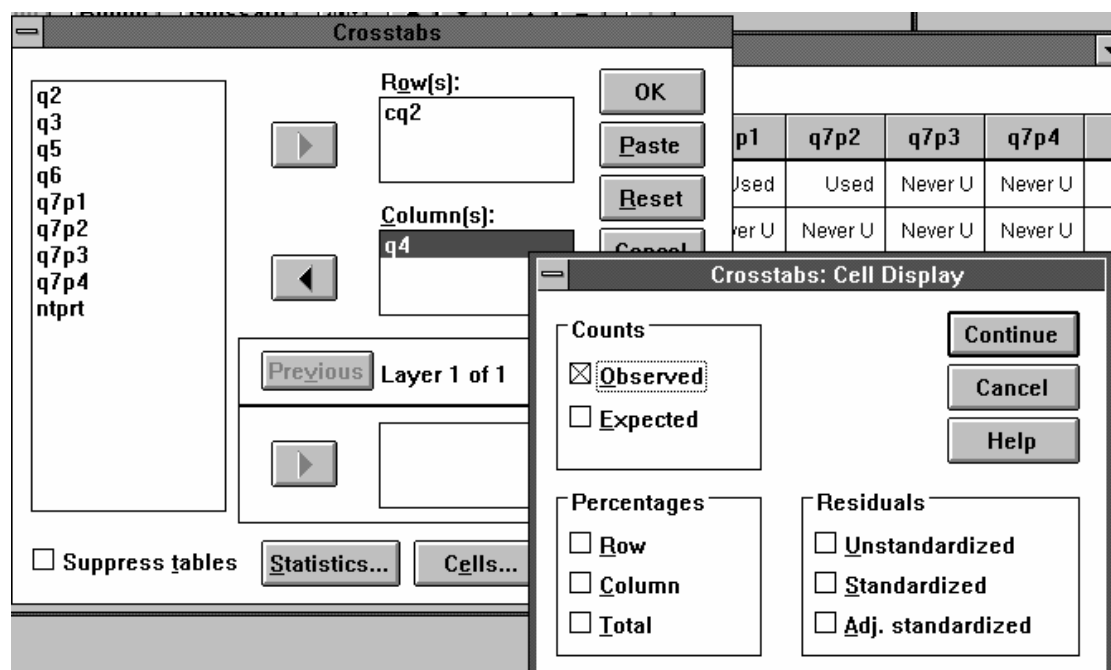
You can do this by using the calculation window under the Compute branch of Transformations. Enter the new variable number, and then use the “type and labels” button to give it a label of Number of terms previous training. You also can let SPSS give it a label of the underlying compute syntax statement.



After generating your new variables, they are then available for use in further analysis commands.

#### D. Tables

Tables can be generated in several places in the Analysis menu. Crosstabs is available under the Descriptive Statistics branch. It gives you the counts and optionally percentages for one variable broken down by the categories of another variable. You might investigate the previous training in Statistics between the Faculties (CQ2 by Q4)



a) CELLS

This optional button allows you to select percentages to add to the count (or the ability to remove the count)

b) STATISTICS

This optional button allows you to add statistics to the table, such as Chi-square.

After you have set up the command, run it and see if you can make any sense of the output. Ask for Statistical advice before interpreting and using it.

Now in the Output Navigator you can learn how to adjust a pivot table:

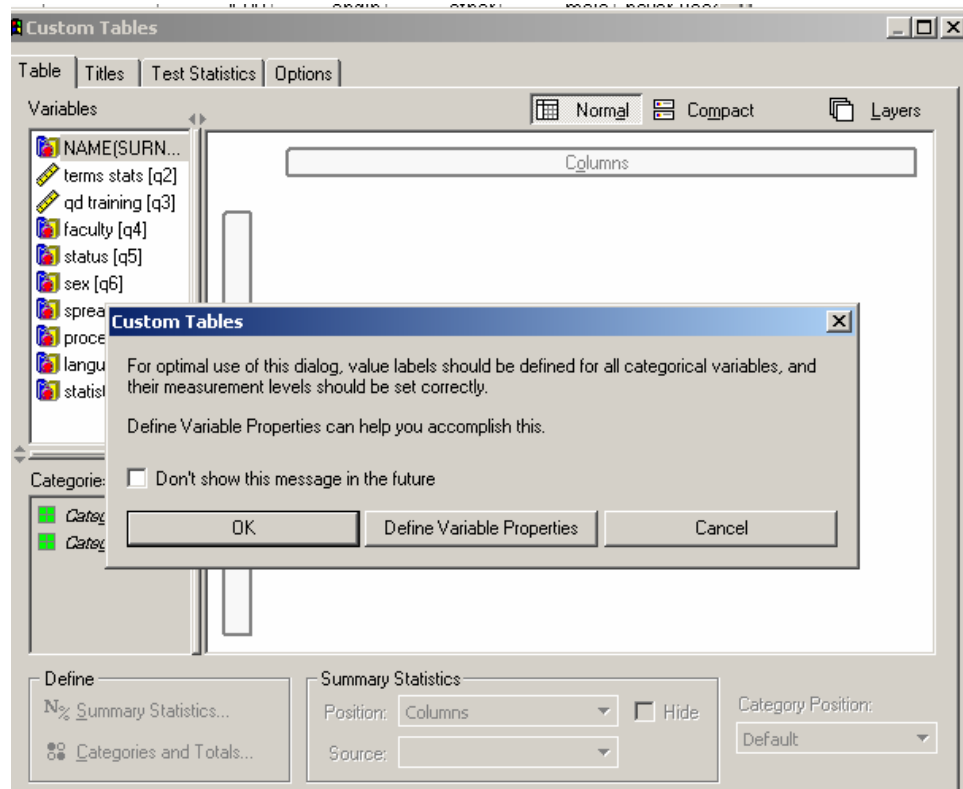
- Double-click on the table you want to adjust.
- Select Pivoting Trays from the Pivot menu.
- Click and drag a pivot icon from one dimension to another. For example, to switch the rows and columns: Drag the column pivot icon to the row tray... And then drag the row pivot icon to the column tray. The rows and columns of the table are now switched.

The order of pivot icons in a tray reflects the order of elements in the table. To change the order of elements in a table, just move the pivot icons into the order you want.

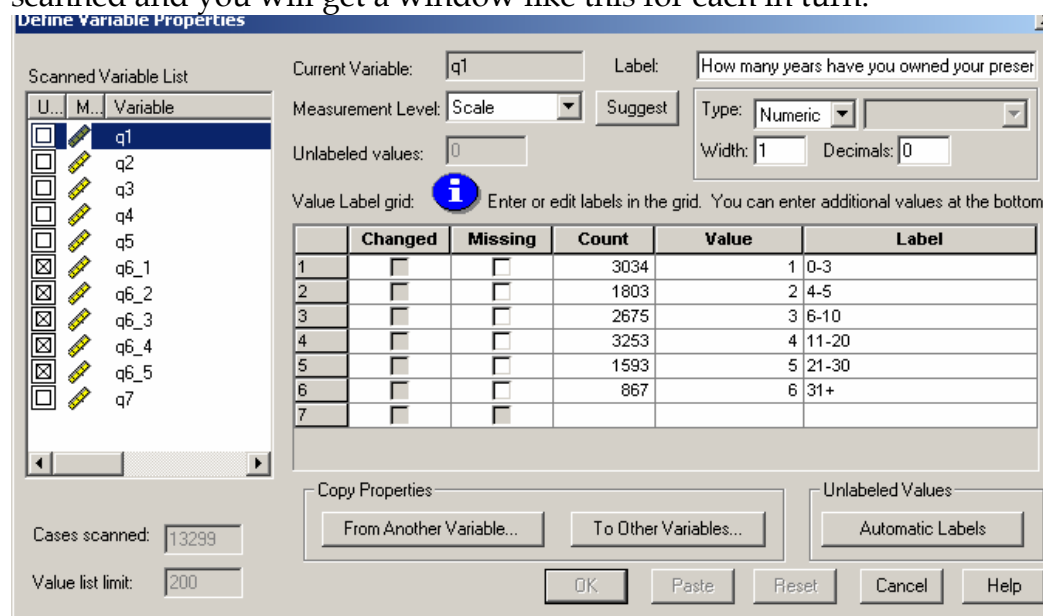
You can also adjust the appearance by using Format | TableLooks. It's possible to generate your own standard table look, which you can apply to almost all tables that SPSS produces.

## 2. Custom Tables

The other way of generating tables can cope with multiple dichotomy variables (like Q7), but is more difficult to do. Under the Analyse menu choose Custom Tables option. First you must set up the variables to their appropriate 'Levels', if you haven't already done this at data definition. You do this by the "define variable properties" box. Then select the variables you want to work with.



Here's what happens if you need to define your variable properties: they all start off as "Scale" – indicated by the ruler. Select some variables to be scanned and you will get a window like this for each in turn.



Click the suggest button, it will show you some helpful comments to explain the options – you then make the appropriate choice.

**Define Variable Properties: Suggest Measurement Level**

Variable:

Current Measurement Level:

Suggested Level:

Ordinal  Nominal

Explanation: q1 has only small, nonnegative, integer values and does not have a large number of different values.

**i** A nominal level is one where the variable values do not have a natural ranking, for example names of countries.

An ordinal level is one where the variable values have a natural order but differences between values are not meaningful, for example, importance of a political position coded "low", "medium", and "high".

A scale level is one where the differences between variable values are comparable, for example, age in years.

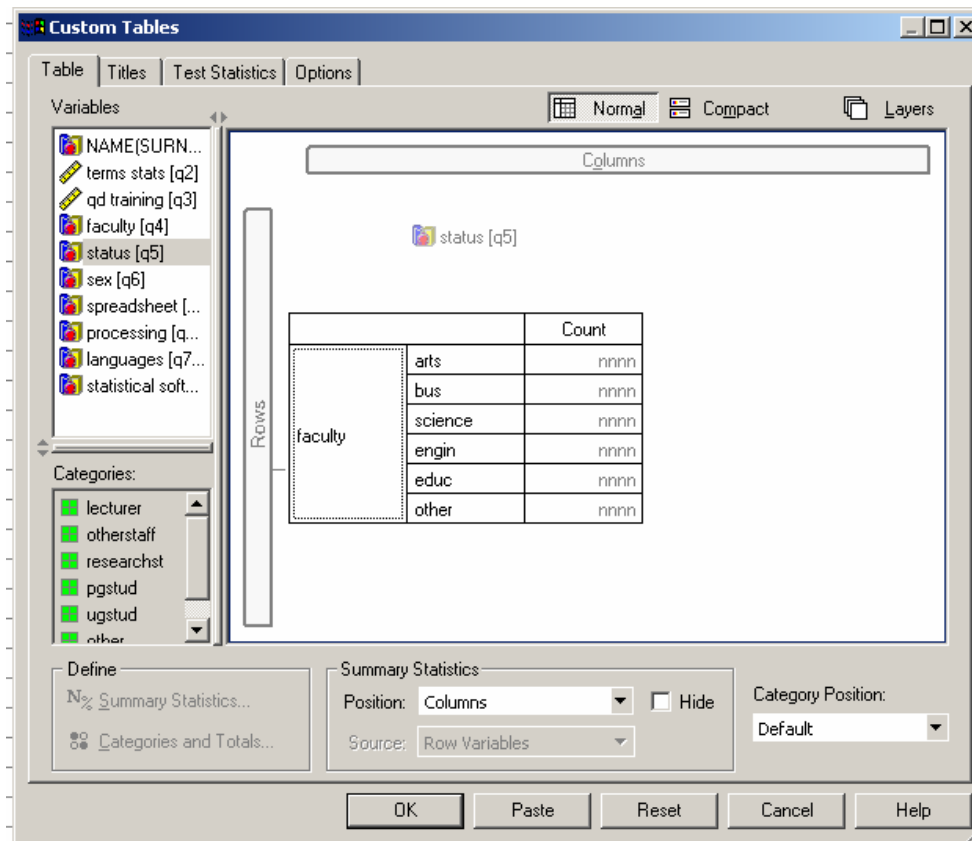
The suggested measurement level is based on empirical rules and is not a substitute for user judgment.

SPSS uses the measurement level in some cases to determine whether the variable defines categories in a table or graph or is to be summarized.

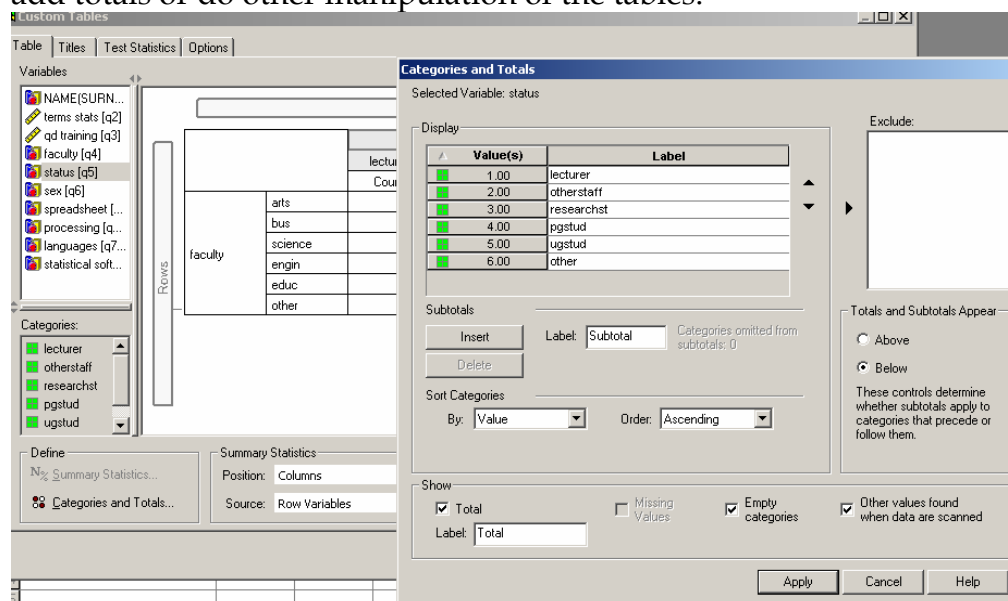
Then do the same for all the variables for which you need to establish measurement levels.

When you have finished with data definition – or if you don't need to do it you then start **Building the table**

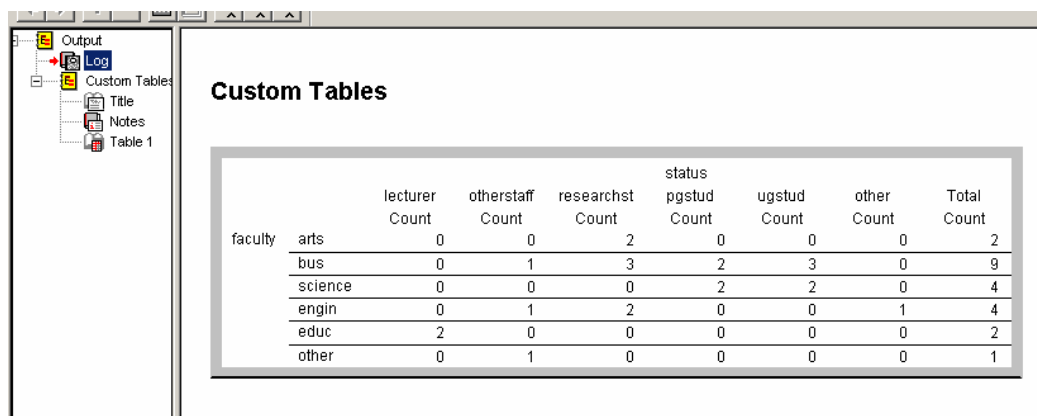
Drag variables from the left window to drop on either the row or column area: as you do this SPSS builds up your table



Use the categories and totals button with either rows or columns selected to add totals or do other manipulation of the tables.



Here's what the partially finished table looks like in the output window. Almost all aspects of the table can be manipulated.

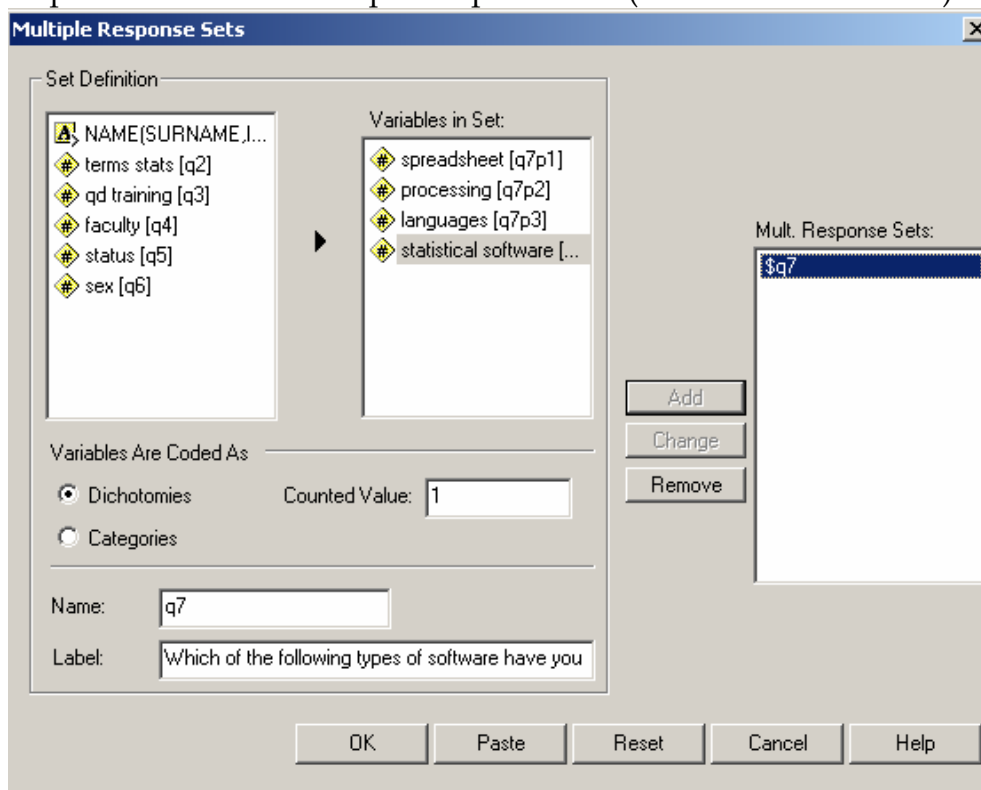


**Custom Tables**

faculty		status						Total Count
		lecturer Count	otherstaff Count	researchst Count	pgstud Count	ugstud Count	other Count	
	arts	0	0	2	0	0	0	2
	bus	0	1	3	2	3	0	9
	science	0	0	0	2	2	0	4
	engin	0	1	2	0	0	1	4
	educ	2	0	0	0	0	0	2
	other	0	1	0	0	0	0	1

### 3. Multiple response

If you want to deal with Q7 appropriately you must define it as a multiple response set within Multiple Response Sets (under Custom Tables).



**Multiple Response Sets**

Set Definition

NAME(SURNAME.I...  
 terms stats [q2]  
 qd training [q3]  
 faculty [q4]  
 status [q5]  
 sex [q6]

Variables in Set:  
 spreadsheet [q7p1]  
 processing [q7p2]  
 languages [q7p3]  
 statistical software [...]

Variables Are Coded As  
 Dichotomies Counted Value: 1  
 Categories

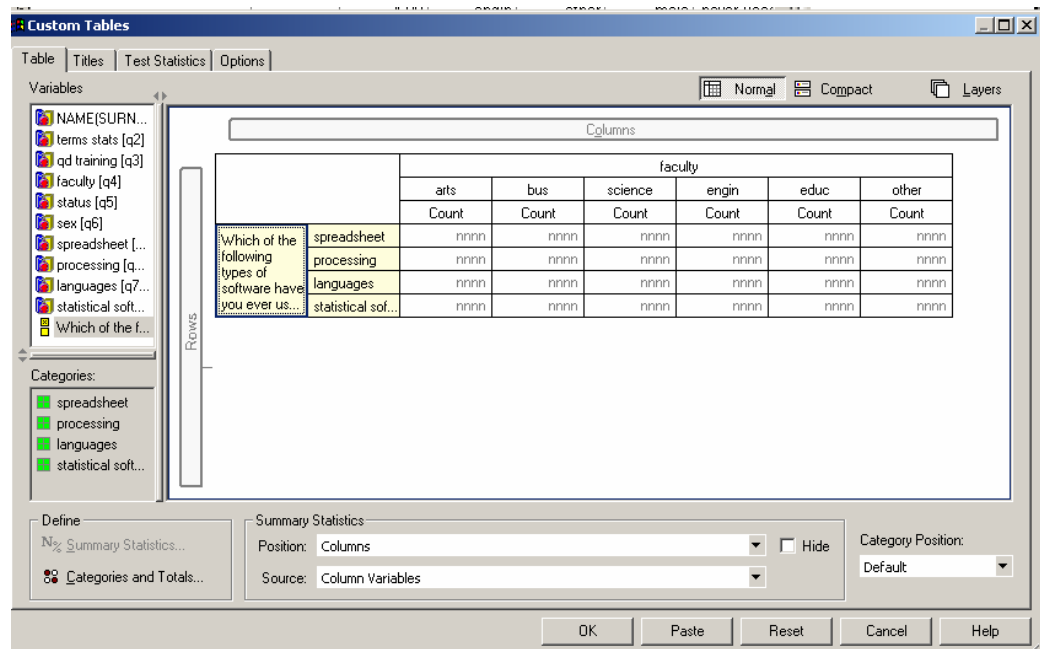
Name: q7  
 Label: Which of the following types of software have you

Mult. Response Sets:  
 \$q7

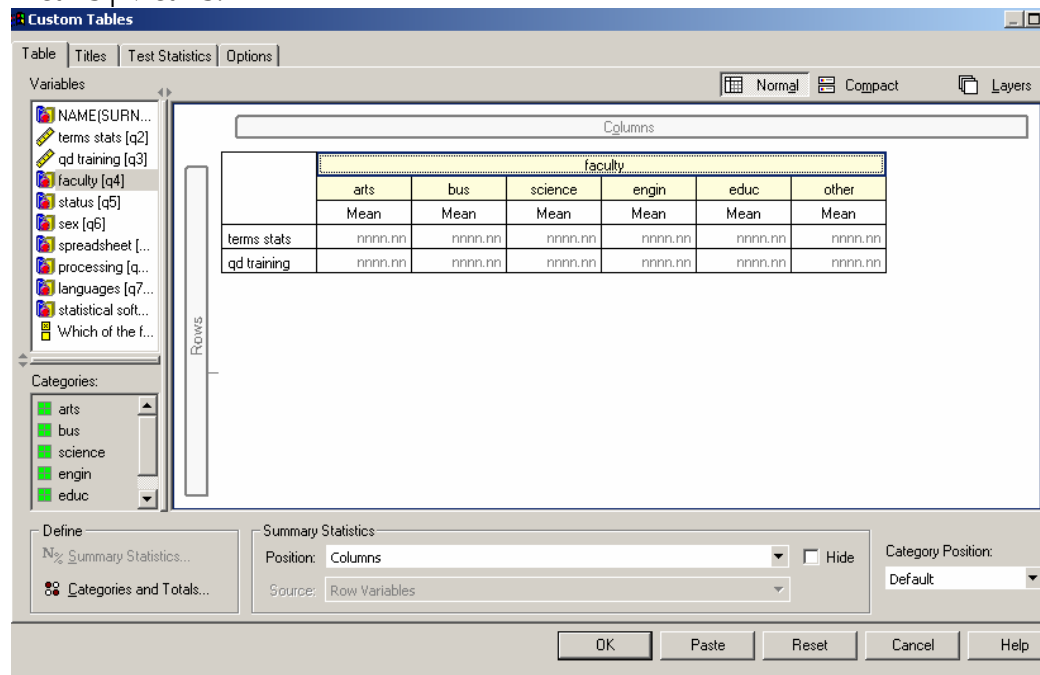
Add  
 Change  
 Remove

OK Paste Reset Cancel Help

Multiple response sets can be either Dichotomies or Categories. In our case we have Dichotomies with 1 as the Counted Value. On your own machine you can save these between sessions. They appear at the end of the list in custom tables. Then you can enter that as the row variable with Q4 as the column in much the same way.



If you want tables with Means in you can also use custom tables or Analyse | Tables | General tables or use the easier Analyse | Compare means | Means.



The finished custom table looks like this in the output window.

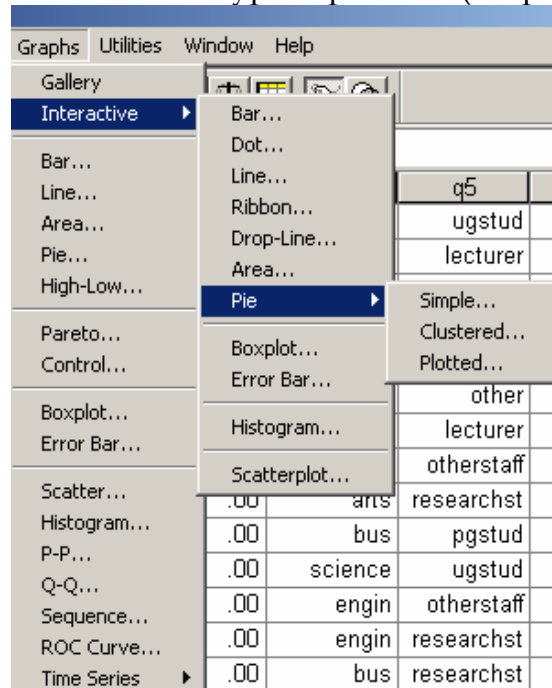
➔ **Custom Tables**

	faculty					
	arts	bus	science	engin	educ	other
	Mean	Mean	Mean	Mean	Mean	Mean
terms stats	1.50	1.00	2.00	2.67	.50	.00
qd training	1.50	.22	.25	1.00	1.50	.00

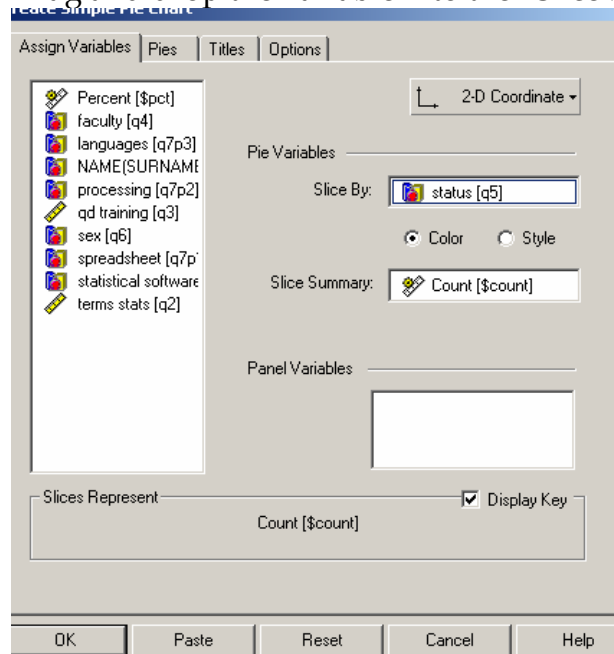
## E. Graphs

Quite a few to try: Bar Charts, Line Charts, Area Charts, Pie Charts, High-Low Charts, Pareto Charts, Control Charts, Boxplots, Error Bar Charts, Scatterplots and Histograms. Try some! There are two sets of procedures the conventional and the Interactive – they work with drag and drop like custom tables. Let's do a pie chart for q5.

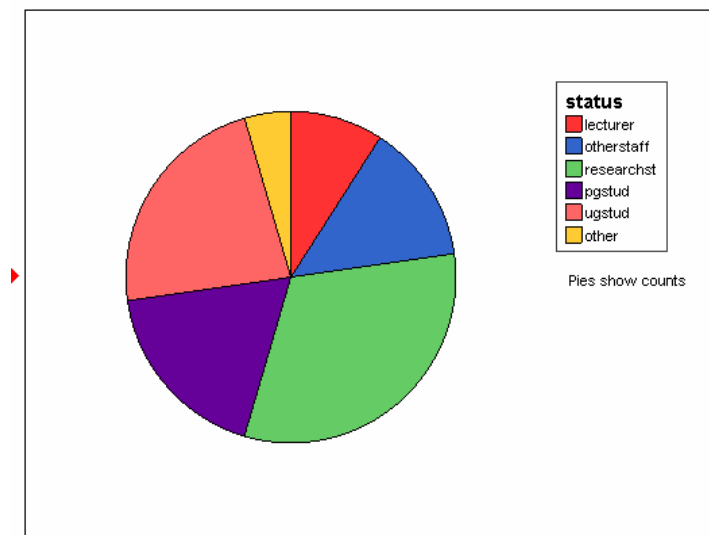
First select the type of pie chart (simple will do for this!):



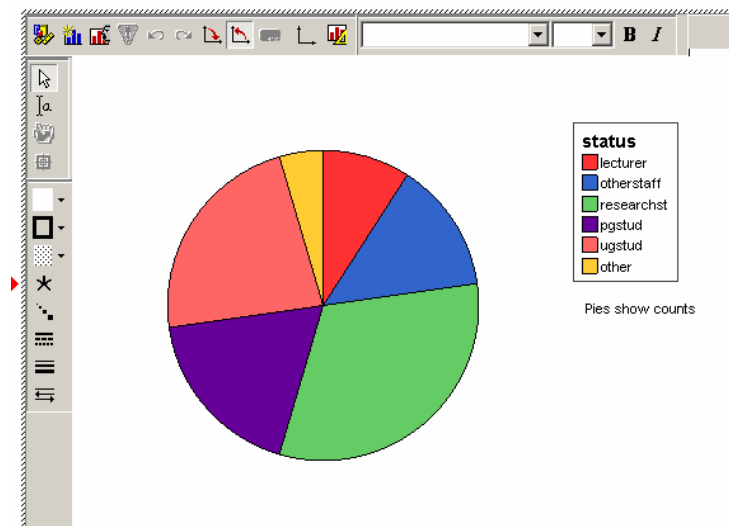
Drag and drop the variable into the "Slice by" slot!



The output window will then contain...

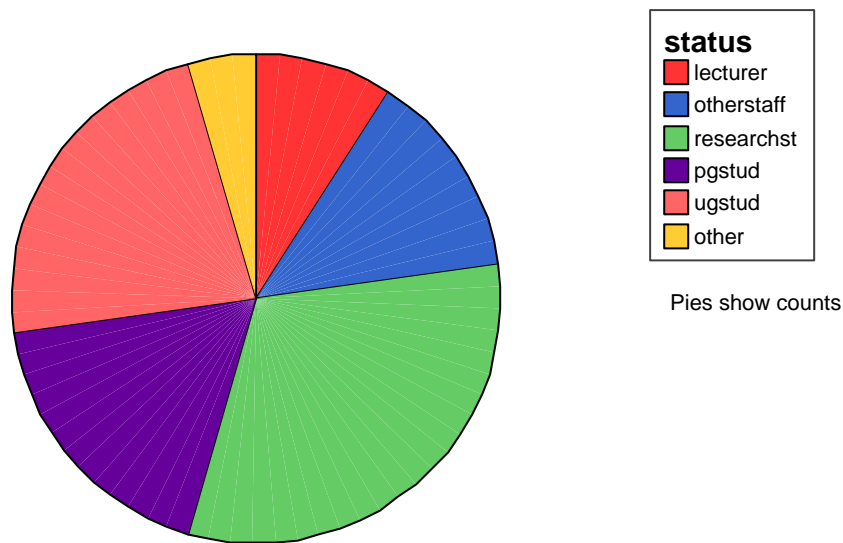


To edit a chart: Double-click on the chart you want.



You can edit the chart from the menus, from the toolbar, or by double clicking on the object you want to edit. To select objects on the chart simply click on them. For example, clicking on the legend title puts a selection box around it and allows you to change the format.

Tables and charts can be easily exported to Word. This can be by copy or copy objects – giving different results in some cases: Custom tables become word tables if you copy; but you can only do one at a time.



In Scatter plots you can label outliers as explained in the following tutorial screen.

**SPSS Tutorials**

**Examining Outliers in Charts** Go to Data Tool

Previous Contents Next

To find out more about one of the extreme values...

Double-click the chart to activate it in a chart window.

Click the Point ID tool.

Click the point in the chart.

And then click the Go to Data tool.

**The case corresponding to the selected point is highlighted in the Data Editor.**

**Chart1 - SPSS Chart Editor**

File Edit View Gallery Chart Series Format Statistics Graphs Help

Point ID tool

\$140,000

\$120,000

\*Martin, T.B.

**Tutorial - SPSS Data Editor**

File Edit View Data Transform Statistics Graphs Utilities Window Help

29:name Martin, T.B.

	id	name	gender	birthdate	educ
29	29	Martin, T.B.	m	01/28/44	19
30	30	Cane, K.	m	09/17/61	15
31	31	Yao, F.	m	02/24/64	12
32	32	Fisk, B.	m	01/28/54	19

SPSS Processor is ready

You can label individual cases when you create a chart... And you can use Point ID to display labels and highlight selected cases in the Data Editor.

## F. Statistics

The following are among those available:

<b>Description</b>	<b>Menu (Under Analyze unless starred)</b>
Descriptive statistics for continuous data	Descriptive Statistics   descriptives
Most useful for discrete data	Descriptive Statistics   frequencies
Aggregate sub-population statistics	* Data   Aggregate
Describes sub-populations	Compare Means   Means
Crosstabulations, including chi-square	Descriptive Statistics   Crosstabs
Student's t-test for 2 small differing groups	Compare Means   Independent samples t-test
Various non-parametric tests	Non-parametric tests
Scatter plot with options to add regression line	* Graphs   Interactive   Scatter
Crosstabulation of multiple response items	Tables   Multiple response sets then Tables   Custom Tables OR Tables   Multiple Response Tables
Report Generator	Reports
Stem & Leaf, box plots	Descriptive Statistics   Explore
Pearson, Kendal & Spearman correlations	Correlate   Bivariate
Partial Correlation	Correlate   Partial
Multiple Regression	Regression   Linear
Non-linear regression	Regression   Curve estimation or nonlinear
One-way analysis of variance	Compare Means   Oneway ANOVA
Analysis of variance and covariance	General Linear Model   Univariate
Multivariate analysis of variance	General Linear Model   Multivariate
Item & Scale Reliability Analysis	Scale   Reliability
Models with category variables	Loglinear   General
Independent variables on dichotomous outcome	Regression   Probit Or Loglinear   Logit
Principle Components and factor analysis	Data Reduction   Factor
Correspondence analysis to model significant tables with many rows and columns	Data Reduction   Correspondence Analysis
Discriminant analysis	Classify   Discriminant
Cluster Analysis	Classify   K-means or Hierarchical Cluster
Multidimensional Scaling &	Scale   Multidimensional Scaling

Unfolding	
Measures of Similarity or Distance	Correlate   Distances
Survival Analysis	Survival   Life Tables
Structural Equation Modelling	AMOS 5

Discuss what you are interested in: if there's time you can try out a simple analysis either with your own data or with one of the other SPSS datasets. SPSS is powerful and risky – it doesn't stop you doing an inappropriate analysis. However learning SPSS is easiest when you can try without risk – and with an expert at hand to try to interpret the consequences.

## V. Further Information

### A. **SPSS documentation:**

SPSS manuals come as PDF files on the distribution CD – they involve at least 3,000 pages – if you print all the manuals, including those for Syntax as well as for the online procedures.

The library has some 70 books, but mainly out of date. Here are those 15 published since the millennium.

Book	Date
Data analysis for using SPSS for Windows versions 8 to 10 : a beginner's guide / Jeremy J. Foster.	2001.
Discovering statistics using SPSS for Windows : advanced techniques for the beginner / Andy Field.	2000.
Doing statistics with SPSS / Alistair Kerr, Howard K. Hall and Stephen Kozub.	2002.
Interpreting quantitative data with SPSS / Rachad Antonius.	2003
Levine's guide to SPSS for analysis of variance / Melanie C. Page, Sanford L. Braver, David P. MacKinnon.	2003.
Quantitative data analysis with SPSS Release 10 for Windows : a guide for social scientists / Alan Bryman and Duncan Cramer.	2001.
SPSS 10.0 guide to data analysis / Marija J. Norusis.	[2000]
SPSS explained / by Perry R. Hinton ... [et al.].	2004.
SPSS for psychologists : a guide to data analysis using SPSS for Windows / Nicola Brace, Richard Kemp and Rosemary Snelgar.	2003.
SPSS for psychologists : a guide to data analysis using SPSS for Windows (versions 8, 9 and 10) / Nicola Brace, Richard Kemp and Rosemary Snelgar.	2000.
SPSS for Windows : an introduction to use and interpretation in research / George A. Morgan, Orlando V. Griego, Gene W. Gloeckner ; in collaboration with Nancy L. Leech ... [et al.].	c2001 .
SPSS for Windows made simple : release 10 / Paul R. Kinnear, Colin D. Gray.	c2000 .
SPSS for Windows step by step : a simple guide and reference, 11.0 update / Darren George, Paul Mallery.	c2003 .
SPSS survival manual : a step-by-step guide to data analysis using SPSS for Windows (Version 10) / Julie Pallant.	2001.
Step-by-step guide to SPSS for sport and exercise studies / Nikos Ntoumanis.	2001.

The following are from the 623 with SPSS in the title from AMAZON.

**Most popular results for: SPSS**

[Discovering Statistics Using SPSS for Windows: Advanced Techniques for Beginners \(Introducing Statistical Methods S.\)](#) ~ Andy Field -- (Paperback - April 2000)

[Quantitative Data Analysis with SPSS for Windows: A Guide for Social Scientists: Release 10](#) ~ Alan Bryman, Duncan Cramer -- (Paperback - January 2001)

- [Doing Statistics with SPSS](#) ~ Alistair Kerr, et al -- (Paperback - February 2002)
- [SPSS Survival Manual: A Step by Step Guide to Data Analysis Using SPSS for Windows \(Version 10\)](#) ~Julie Pallant Open University Press Paperback - March 2001
- [Discovering Statistics Using SPSS for Windows: Advanced Techniques for Beginners \(Introducing Statistical Methods S.\)](#) ~Andy Field Sage Publications Ltd Paperback - April 2000
- [SPSS for Psychologists](#) ~Nicola Brace, et al Palgrave Macmillan Paperback - January 24, 2003
- [SPSS for Windows Made Simple: Release 10](#) ~Paul R. Kinnear, Colin D. Gray Psychology Press Paperback - August 2000
- [Quantitative Data Analysis with SPSS for Windows: A Guide for Social Scientists: Release 10](#) ~Alan Bryman, Duncan Cramer Routledge, an imprint of [Doing Statistics with SPSS](#) ~Alistair Kerr, et al Sage Publications Ltd Paperback - February 2002
- [A Crash Course in SPSS for Windows: Versions 10 and 11](#) ~Rod Corston, Andrew Colman Blackwell Publishers Paperback - November 2002
- [A Handbook of Statistical Analyses Using Spss](#) ~Sabine Landau, Brian S. Everitt Chapman & Hall/CRC Paperback - November 24, 2003
- [SPSS for Windows Step by Step: A Simple Guide and Reference, 11.0](#) ~Darren George, Paul Mallery Allyn & Bacon Paperback - August 2002
- [SPSS Analysis Without Anguish: Version 10.0 for Windows](#) ~Sheridan J. Coakes, Lyndall G. Steed John Wiley Paperback - March 14, 2001

### **B. SPSS for Windows Advice**

If you don't have an SPSS expert in your department, Dr Tagg can give limited advice (Ext. 2409 Stenhouse 5.34 email: s.k.tagg@strath.ac.uk). However if this is any longer than half an hour, you will need to get your supervisor or head of department to negotiate with HOD Marketing! Also try the network news comp.soft-sys.spss or chest-spss on the UK academic mailgroups platform.

### **C. Other SPSS Platforms**

VAX; MAC; UNIX.

### **D. Availability**

Stenhouse 3.17/19 has SPSS 12.0.1. Many other teaching labs have SPSS but not necessarily the most up to date version. Through the CHEST Deal you can obtain a copy for your individual research machine: you need to borrow a CD. Ask at network and computing services reception (Library Reception - on the right). The license needs renewing in October each year.

### **E. Citing SPSS**

There are two approaches. First, when you first cite SPSS in the text, you put the name of the company and the location of the company in parentheses behind it (SPSS Inc., Chicago IL). This is similar to how you would document a vendor of laboratory supplies.

Notice that the "author" of the SPSS manual is actually a company. Even more interesting is the author is also the publisher. If we could do that, we wouldn't have to worry about "publish or perish."