An Introduction to SPSS

Workshop Session

conducted by:

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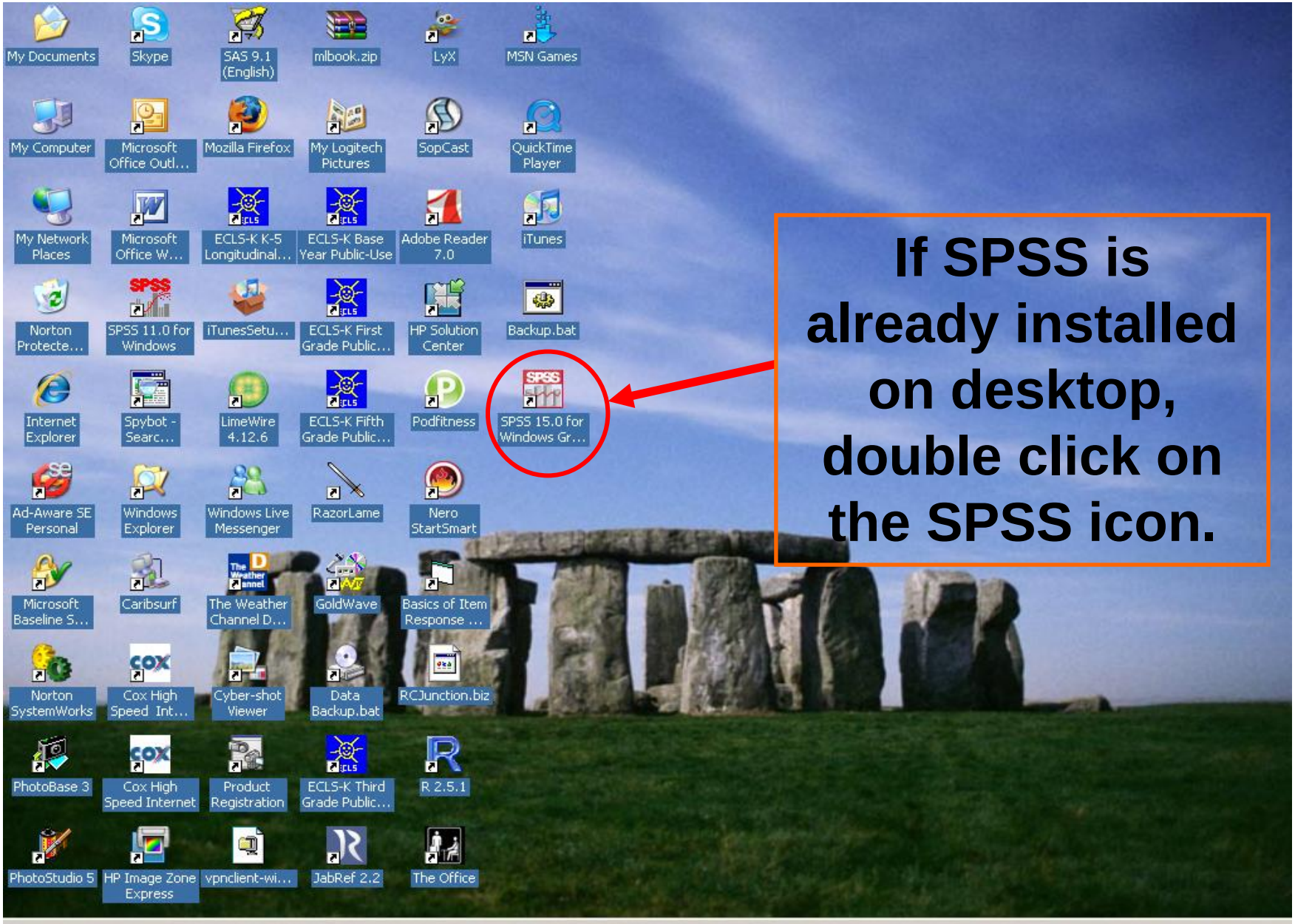
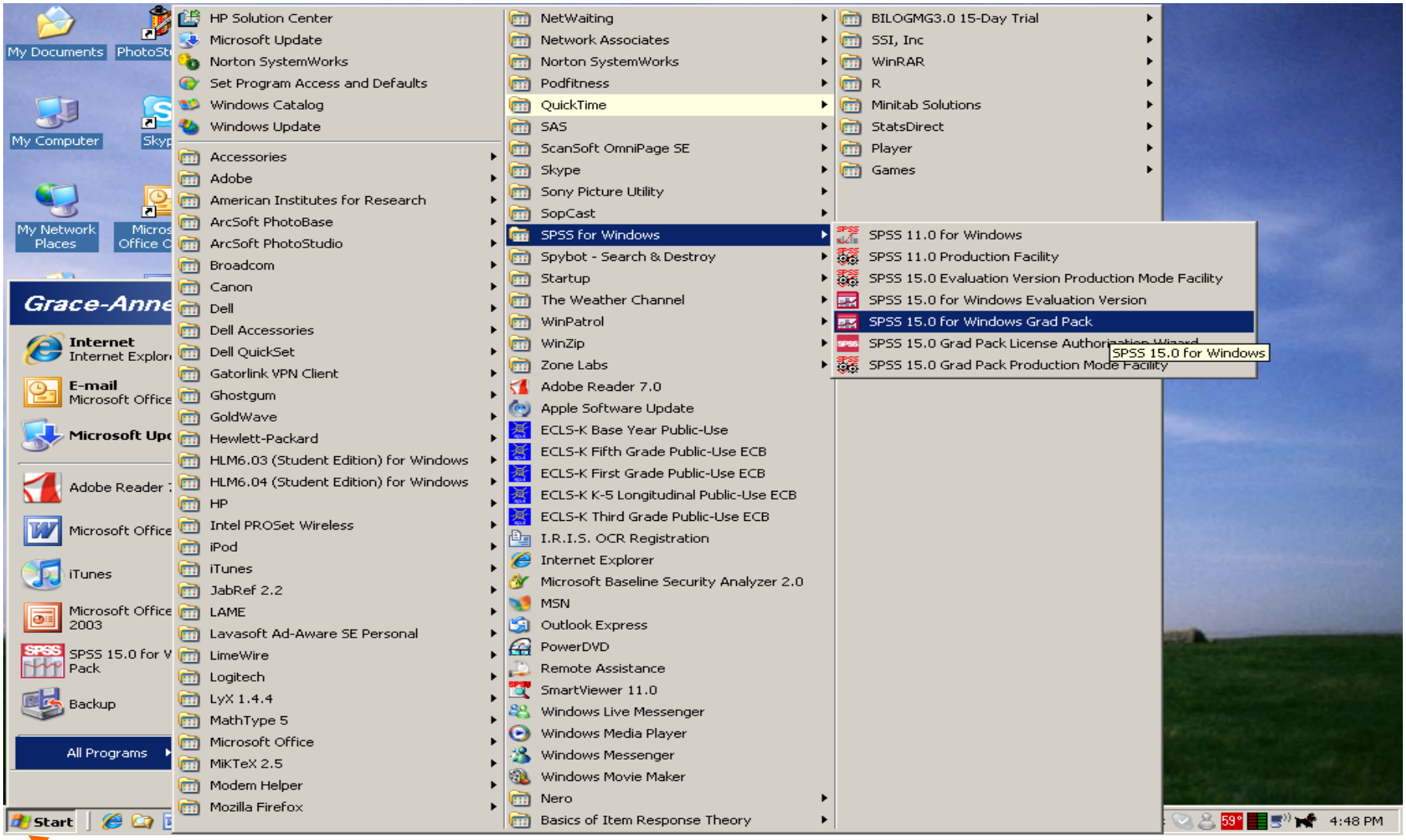
Topics to be Covered

- Starting and Entering SPSS
- Main Features of SPSS
- Entering and Saving Data in SPSS
- Importing Data from Excel
- Simple Data Manipulations
- Performing Descriptive Statistics

Session 1:
Starting and Entering SPSS

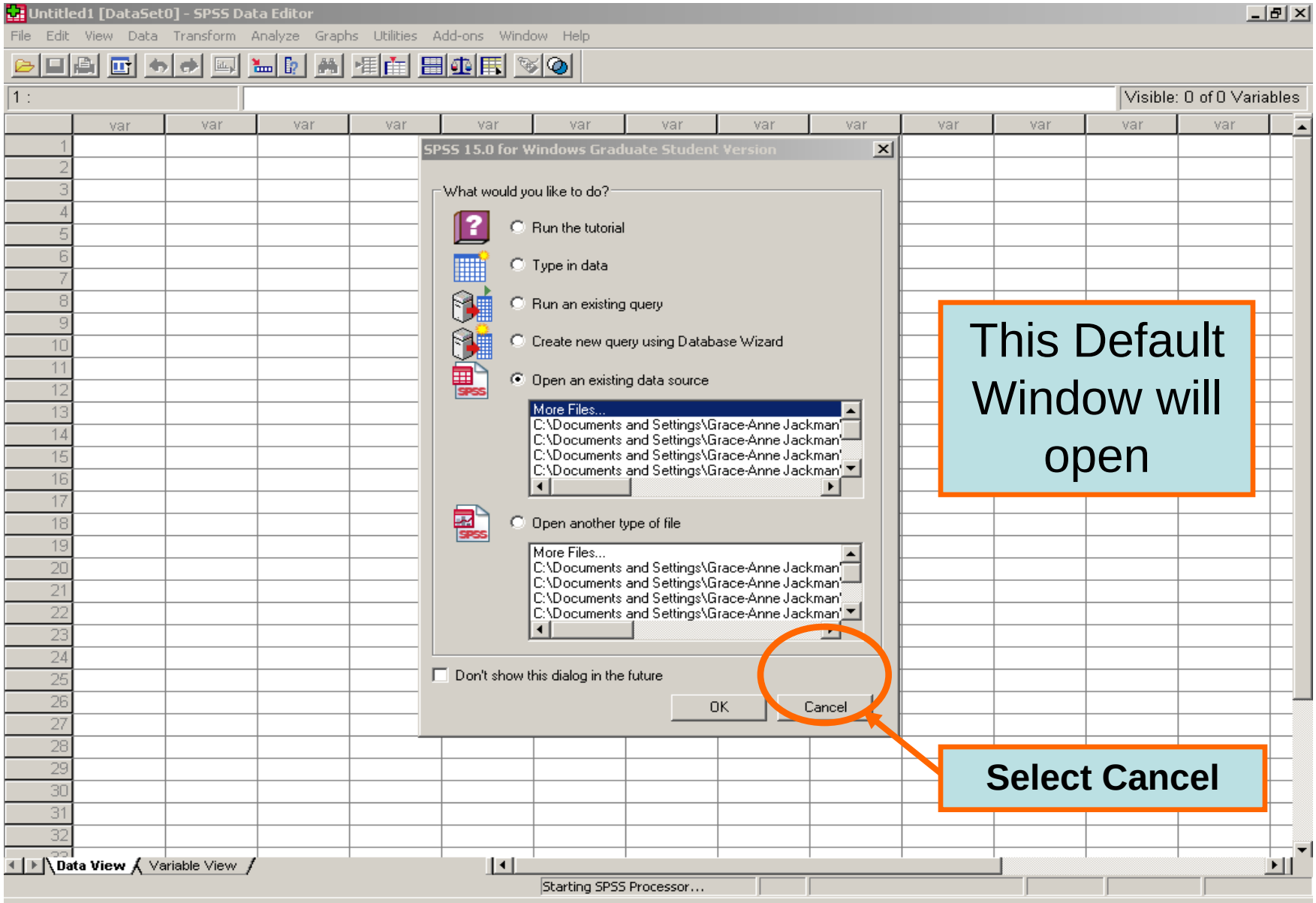


If SPSS is already installed on desktop, double click on the SPSS icon.



- **Open SPSS Via the Start Menu**
  Start > All Programs > SPSS for Windows > SPSS 15.0 for Windows Graduate Pack
- **Your SPSS Version Number may be different.**

Entering SPSS

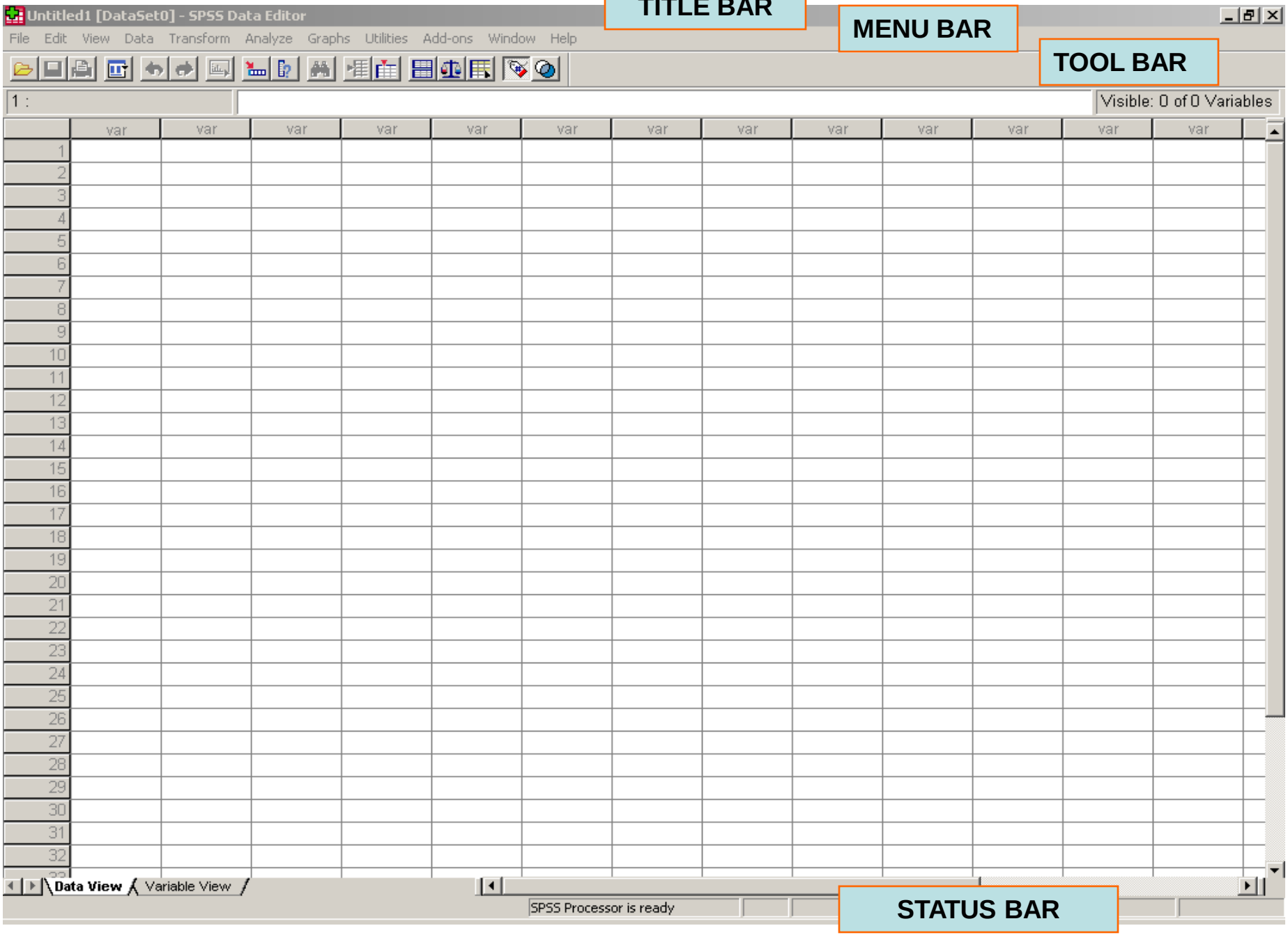


Session 2:

Overview of Main SPSS Features

Four Main Bars

1. The Title Bar
2. The Menu Bar
3. The Tool Bar
4. The Status Bar


TITLE BAR
MENU BAR
TOOL BAR
Untitled1 [DataSet0] - SPSS Data Editor
File Edit View Data Transform Analyze Graphs Utilities Add-ons Window Help
1 :
Visible: 0 of 0 Variables
var
Data View
Variable View
SPSS Processor is ready
STATUS BAR

TITLE BAR

1 

Name of File

Type of Window

MENU BAR

2 

- **Located below the Title Bar**
- **Lists a set of the actions/procedures that can be performed**
- **Uses point and click format to choose from the Pull-Down Menus selection of actions**

MENU BAR

Action	Common Uses
FILE	√ Open a new/existing file
	√ Open a new file
	√ Import data into SPSS from an existing text file, Excel spreadsheet or Database
	√ Save the data file
	√ Exit SPSS for Windows
EDIT	√ To make changes to the data - Copy, Paste, Insert Variables, Insert Cases etc.
VIEW	√ Hide or show Status bar or Toolbar
	√ Change font or point size of the data
	√ Hide or show gridlines
	√ Switch between Data View and Variable View

MENU BAR

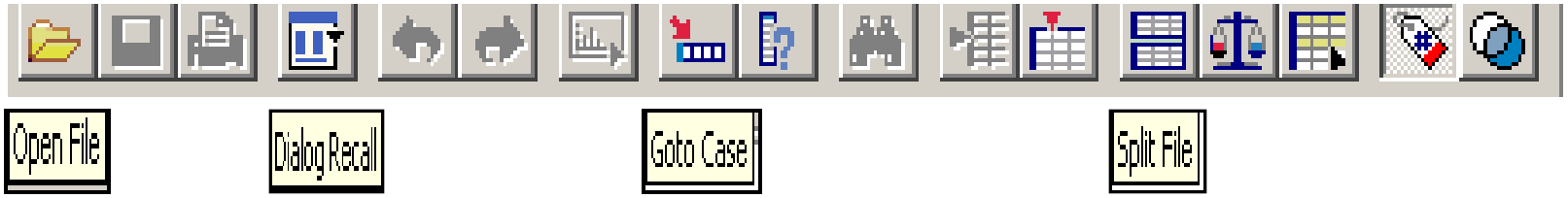
Action		Common Uses
DATA	√	To manipulate existing SPSS data files - Define variables, Sort cases, Merge files, Split files, Select cases, Weight cases etc.
TRANSFORM	√	Perform computations on variables - Create new variables from existing ones. Recode old variables etc.
ANALYZE	√	Contains extensive list of statistical analysis that can be conducted: Ex: Descriptive statistics, ANOVA, Regression etc.
GRAPHS	√	To obtain high resolution plots and graphs, which can be edited in Chart Editor window.

MENU BAR

Action		Common Uses
UTILITIES	√	**To move to any open window or to see which window is active. The window with a check mark is the active one.**
ADD-ONS	√	**Contains a number of Additional Advanced SPSS Products that can be purchased separately and used in conjunction with the base product. Ex: SPSS Conjoint, SPSS Tables, SPSS Maps etc.**
WINDOW	√	**To move to any open window or to see which window is active. The window with a check mark is the active one.**
HELP	√	**To get help on topics in SPSS via a Predefined List of Topics, Tutorial, Statistics Coach, Syntax Guide etc.**

TOOL BAR

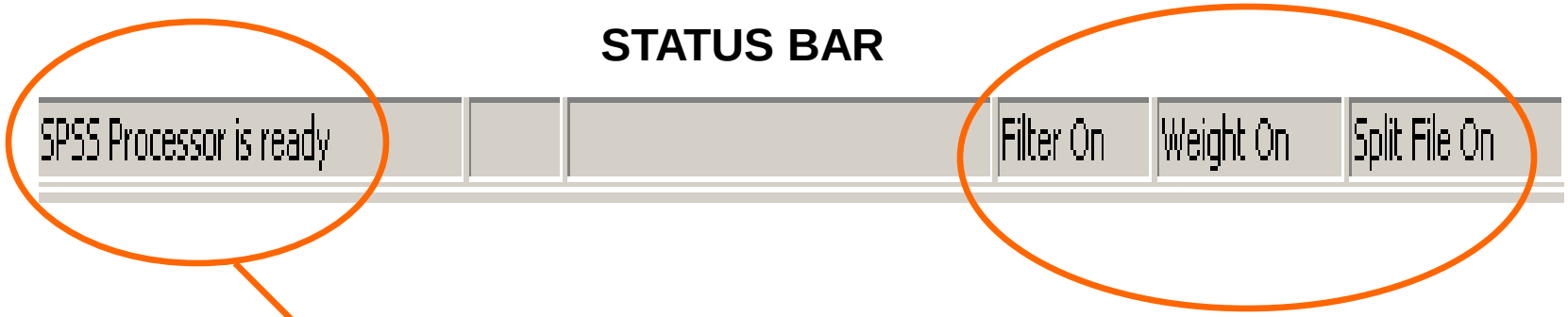
3



- **Located below the Menu Bar**
- **Contains a number of buttons which act as shortcuts**
- **Roll cursor over each button to see its function**

STATUS BAR

4



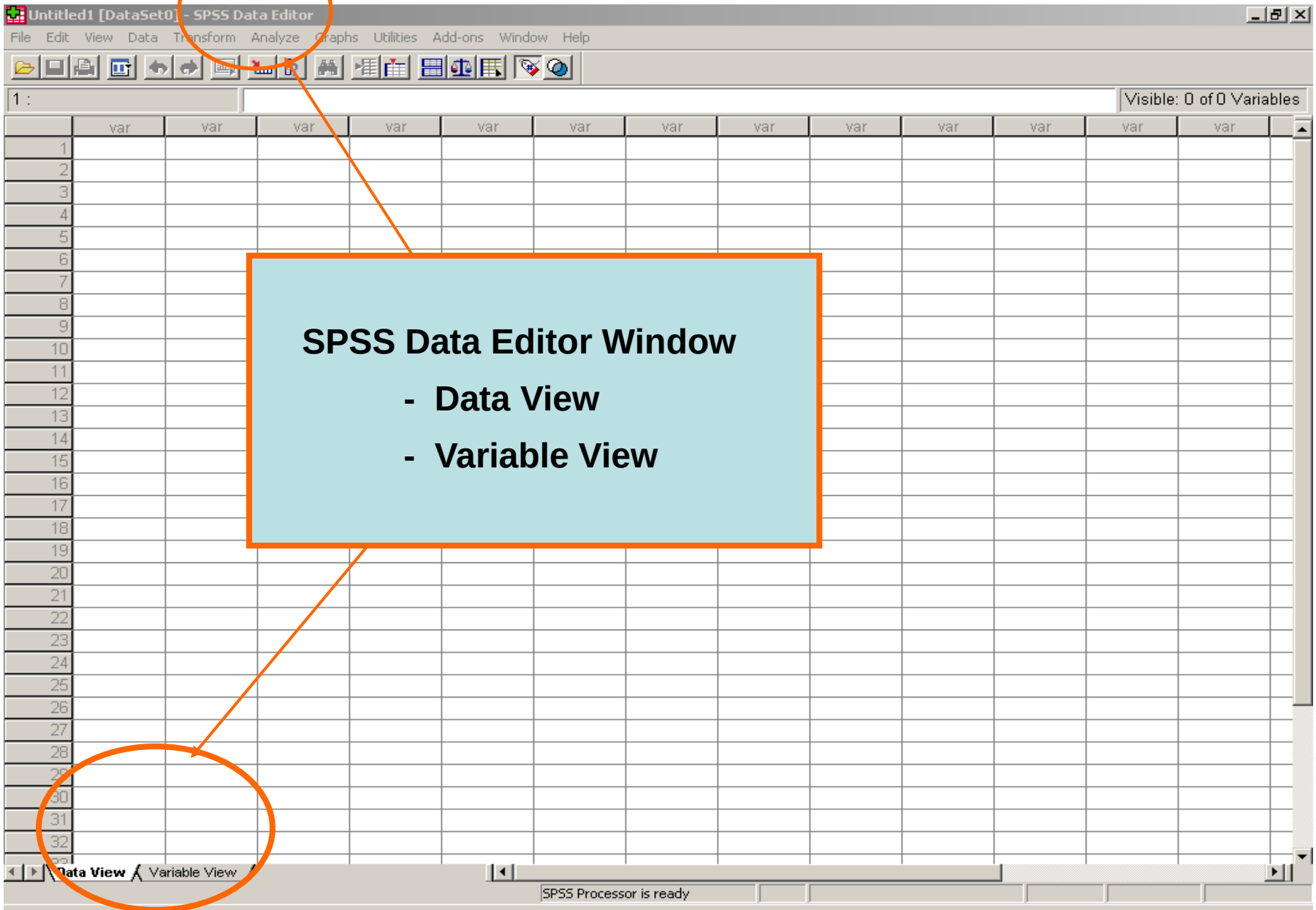
Shows status of procedures being run

Indicates whether data are being filtered, weighted or subdivided

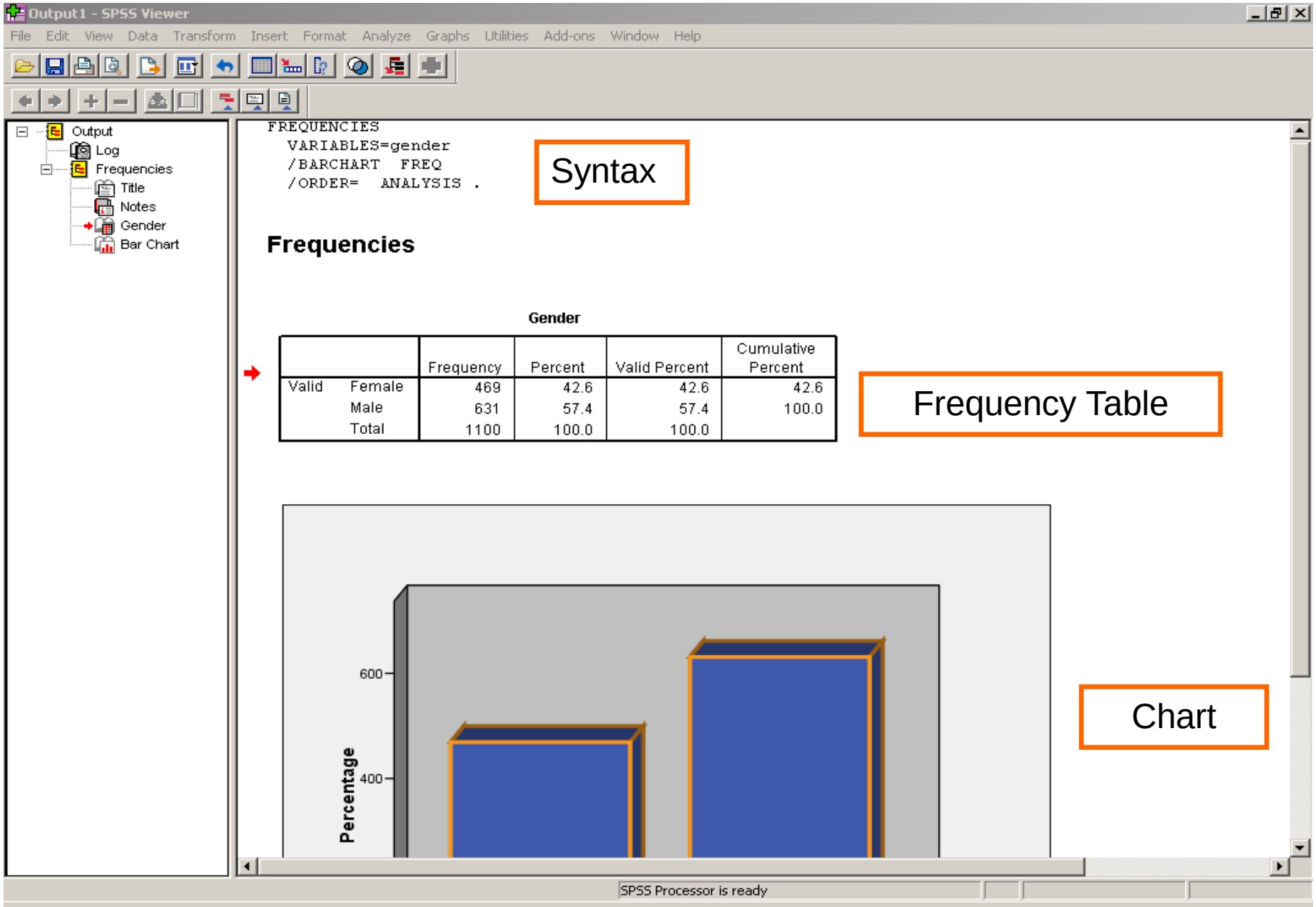
Three Primary Windows

1. The Data Editor Window
   - Data Viewer
   - Variable Viewer
2. The Output Viewer Window
   - Contains all the results from performing analyses, e.g. syntax, tables, charts etc.
3. The Syntax Editor Window
   - Used to write SPSS programs to run procedures
   - Used as an alternative to running analyses via the commands in the Menu Bar

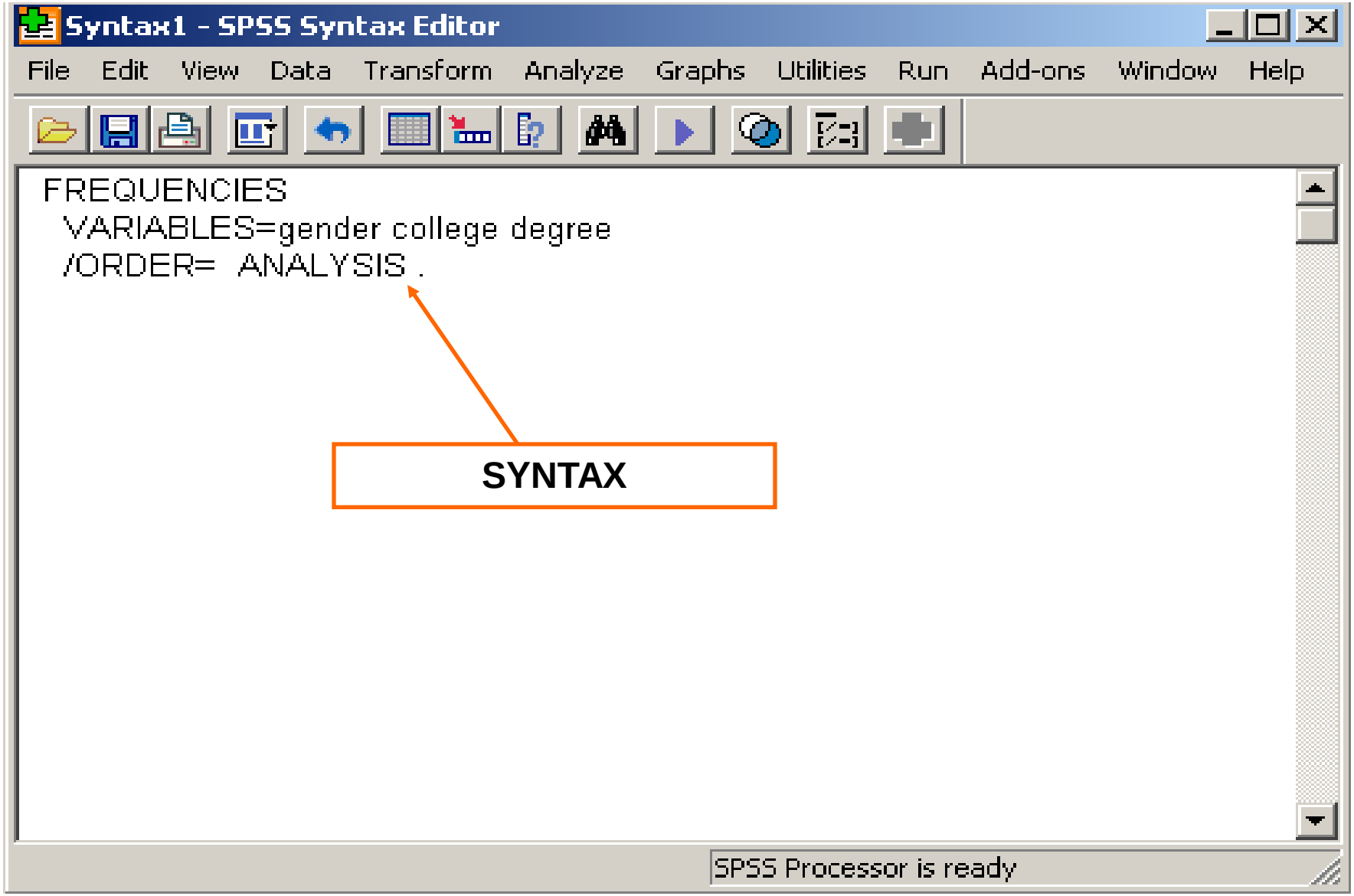
The Data Editor Window



Output Viewer Window

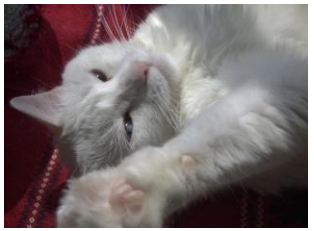


Syntax Editor Window



Session 3:
Entering Data in SPSS

Pet Survey



We are very interested in learning more about the pets of students, faculty, and staff at the University of Florida! Please take a few minutes to fill out the survey below. If you do not have a pet, please feel free to imagine a "fantasy" pet and answer the questions with fantasy data.

1. Please circle your average level of happiness on a scale of 1 (extremely unhappy)) to 10 (extremely happy))

   (extremely unhappy) **1** **2** **3** **4** **5** **6** **7** **8** **9** **10** (extremely happy)

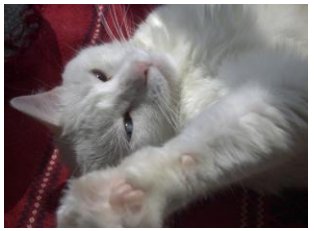
2. How many pets do you own? _____ pets

3. What is the name of the pet you have owned the longest (or the name of your fantasy pet)? _____

The next set of questions will apply to the pet you have owned for the longest amount of time (or your fantasy pet).

4. How old is this pet? _____ years

Pet Survey (cont'd)



5. What is the sex of your pet? ○1 Male ○2 Female

6. What type of animal is this pet? ○1 Dog ○2 Cat ○3 Bird ○4 Fish
○5 Other, please specify _____

7. How much does your pet weigh? _____ lbs

8. How satisfied are you with owning this pet?

○1 Very dissatisfied ○2 Dissatisfied ○3 Neutral ○4 Satisfied ○5 Very satisfied

9. How much money (approximately) do you spend on this pet per year (for food, toys, vet visits, etc.)? $ _____

10. How much time do you spend each week caring for, exercising or playing with your pet? _____ hours

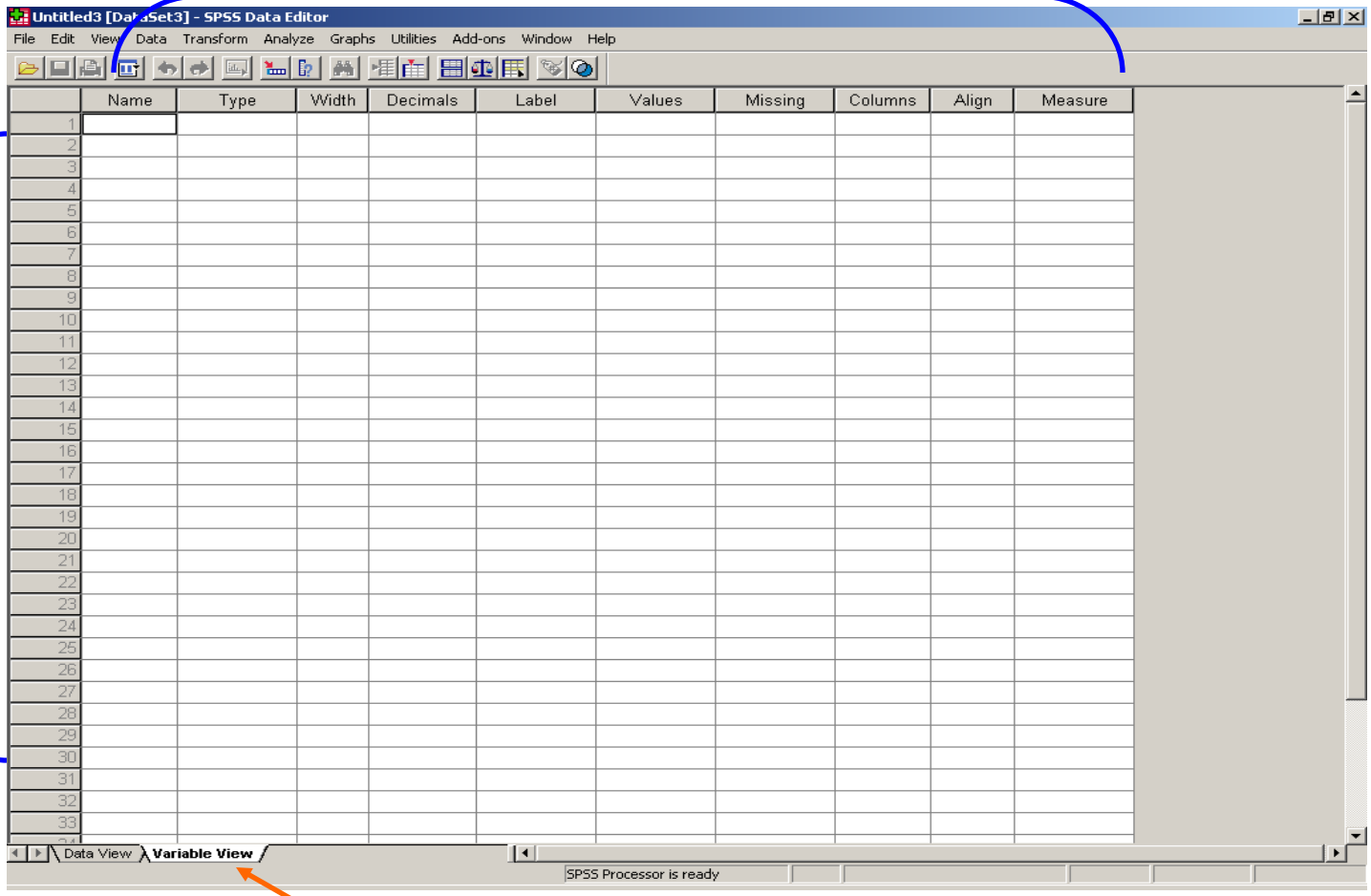
Pet Survey

Setting Up the Variables

Setting Up the Variables

- Click on the Variable View Tab at the bottom left of the Data Editor Screen
- Each row represents one of the variables
- Each column represents a specific characteristic/attribute of the variable

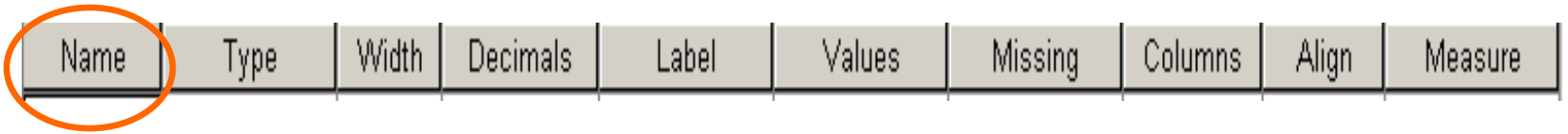
The columns represent specific characteristics of the variables



ROWS represent the Variables used in the study

Variable View Tab is now highlighted

Name

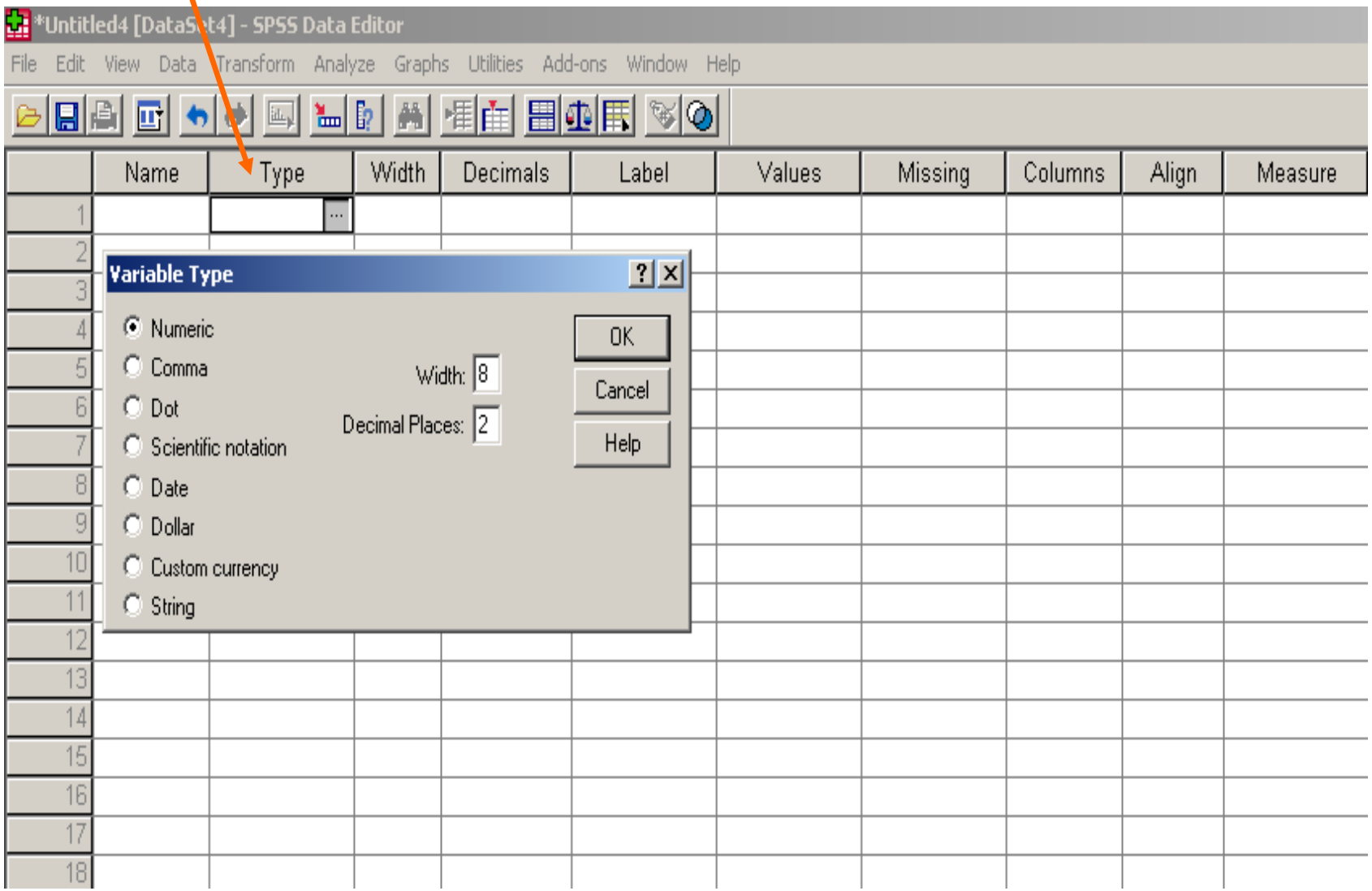


- In the first column, enter the ***Name*** of the Variable.
- Each name must be unique
- It can be up to 64 characters long
- The name cannot begin with a number of contain spaces
- Keep names short but descriptive of variable
- Type in ***Happiness***

Type

- In the second column, click on right of this column
- Select the ***Variable Type***
- The Default is Numeric
- If Numeric, select the Width - Number of digits as well as the Number of Decimal Places
- The Default is Width – 8, Decimal Place - 2

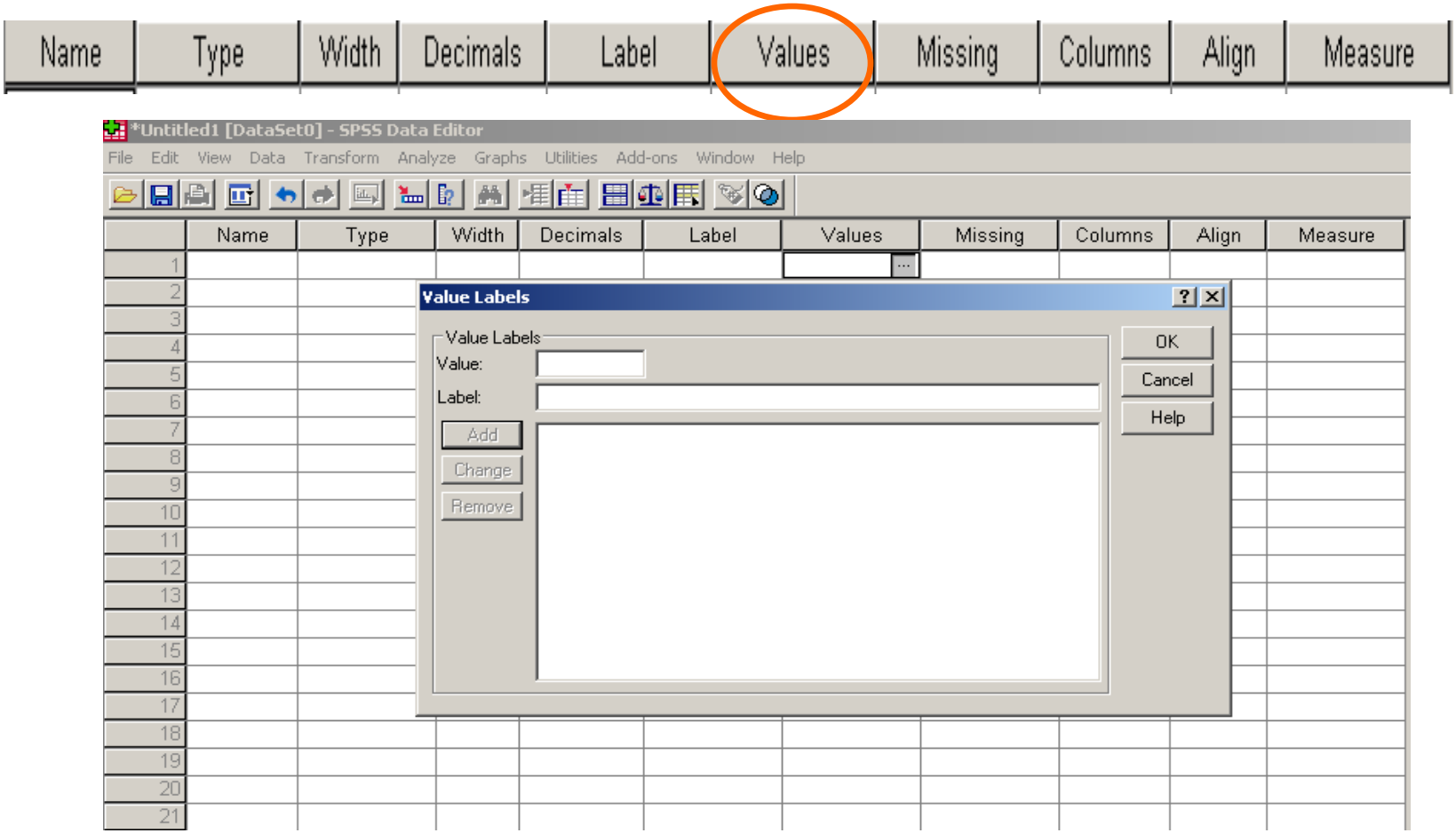
Type (cont'd)


*Untitled4 [DataSet4] - SPSS Data Editor
File Edit View Data Transform Analyze Graphs Utilities Add-ons Window Help
Name
Type
Width
Decimals
Label
Values
Missing
Columns
Align
Measure
Variable Type
Numeric
Comma
Dot
Scientific notation
Date
Dollar
Custom currency
String
Width: 8
Decimal Places: 2
OK
Cancel
Help

Label

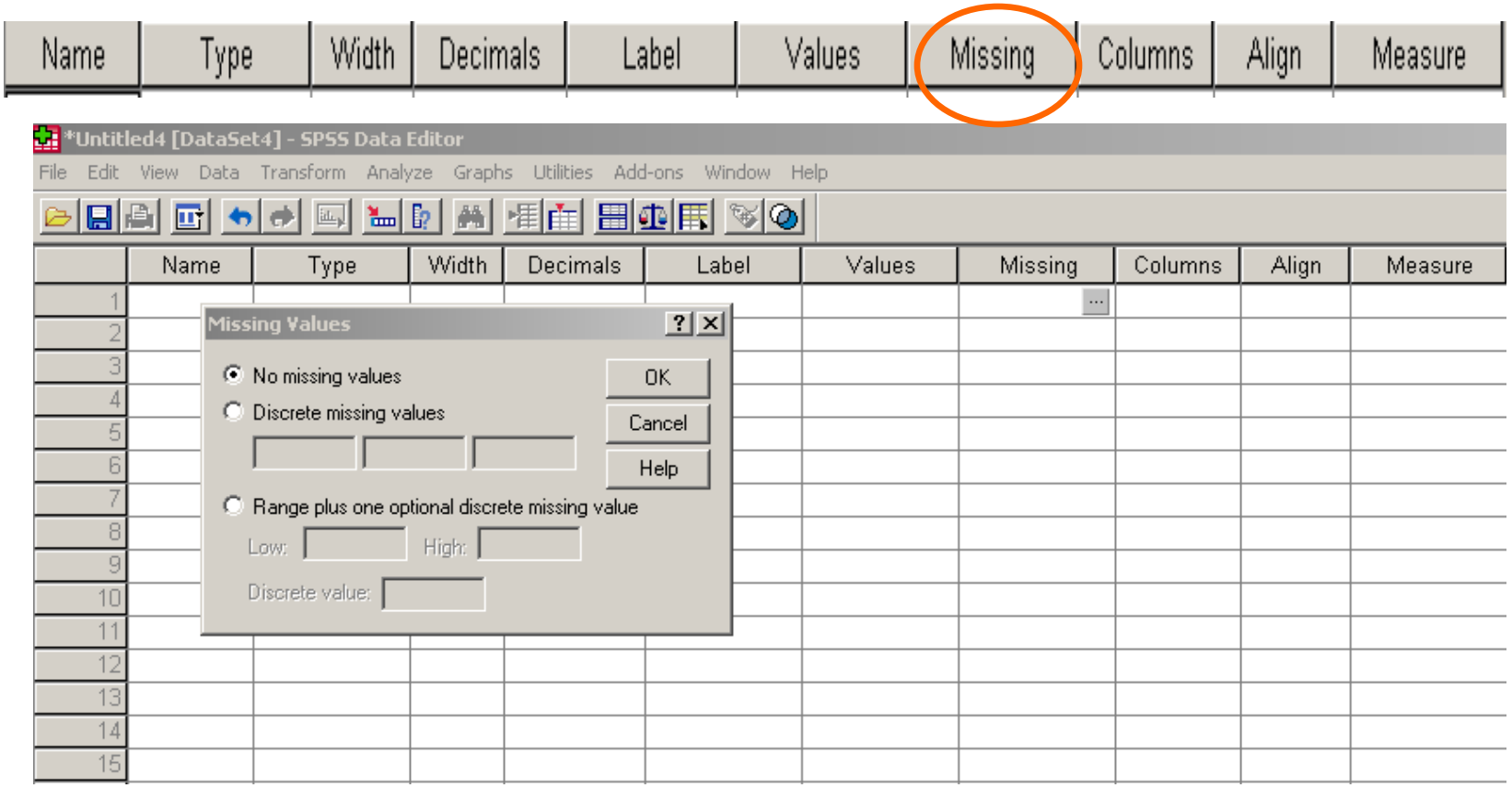
- Label allows you to provide the variable with a longer, more complete description
- Type in *Average level of happiness on a scale of 1 to 10*

Value Labels



- Used for describing the labels of the categories for Nominal or Ordinal (Categorical) Data

Missing Values



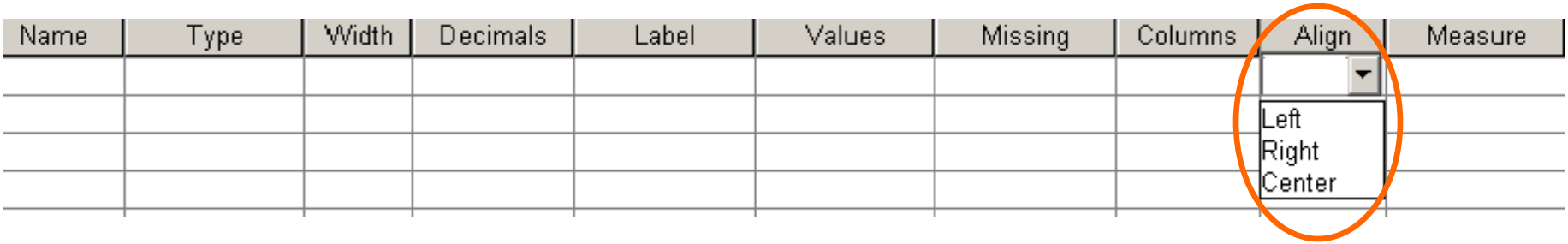
- Used to define specific values as being Missing values: non-response, refusal (e.g. 9, 99)
- Should not be legitimate coded values already included in the data set

Column Width

- The value used for column width indicates how wide the display for each variable will be in the Data View.

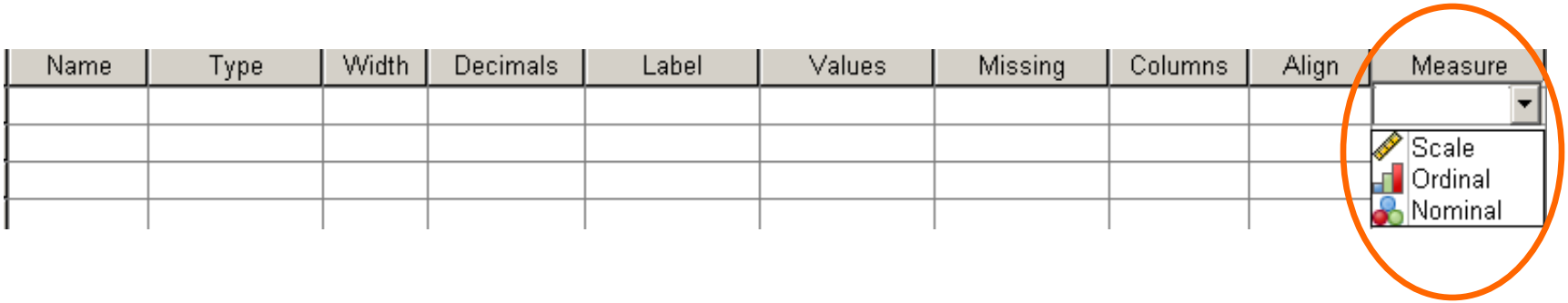
- Column widths can also be changed in Data View, by clicking and dragging the column borders.

Alignment



- Determines how the data for this variable are aligned in their cells in the Data View Window

Measurement Level

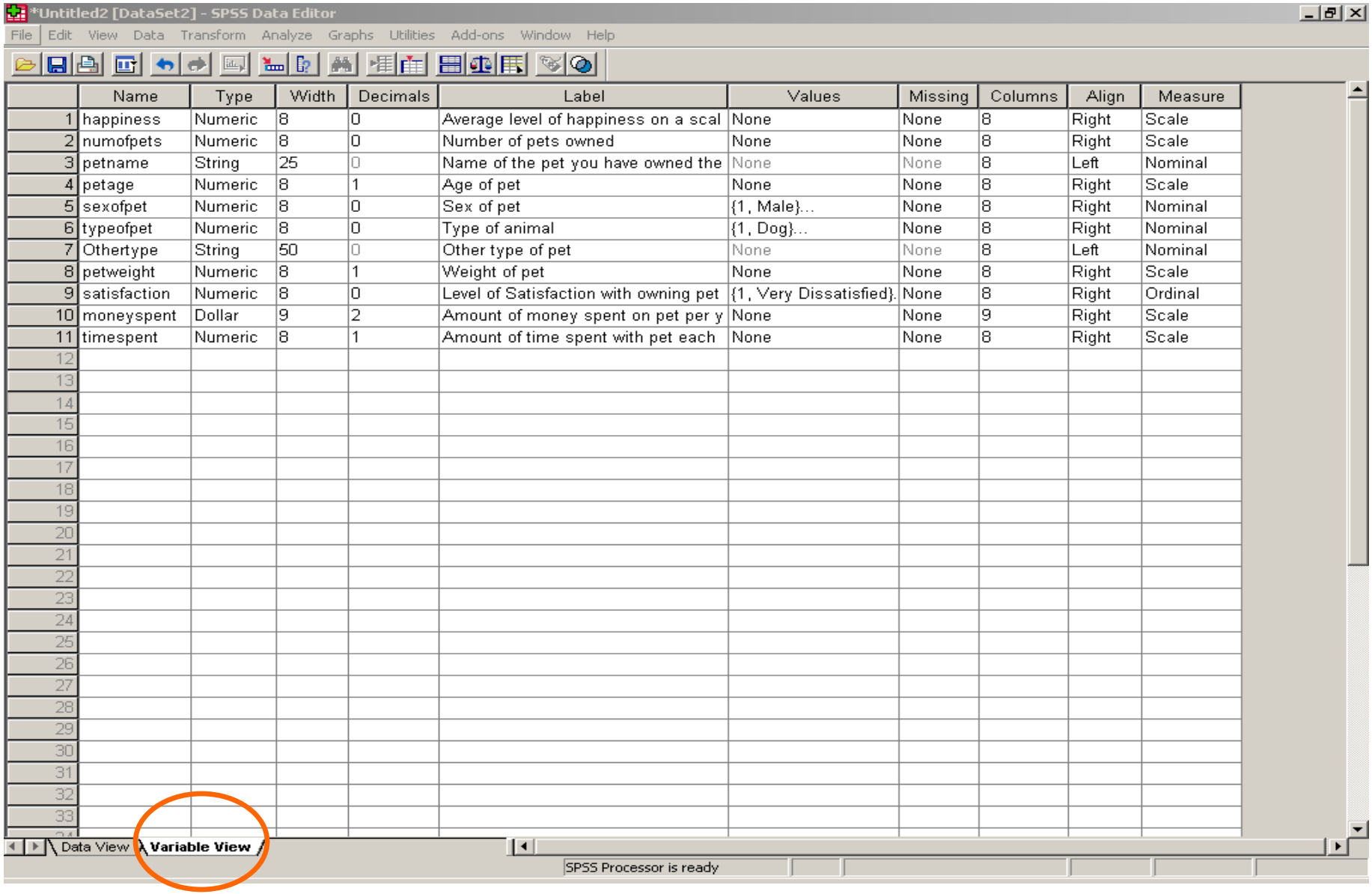


- Specify the variable's measurement level as:
  - Nominal
  - Ordinal
  - Scale (Interval or Ratio)

Setting up the Variables

- Set up the other Variables in SPSS
  - numofpets
  - petname
  - petage
  - sexofpet
  - typeofpet
  - Othertype
  - petweight
  - satisfaction
  - moneyspent
  - timespent

Setting Up the Variables



	Name	Type	Width	Decimals	Label	Values	Missing	Columns	Align	Measure
1	happiness	Numeric	8	0	Average level of happiness on a scal	None	None	8	Right	Scale
2	numofpets	Numeric	8	0	Number of pets owned	None	None	8	Right	Scale
3	petname	String	25	0	Name of the pet you have owned the	None	None	8	Left	Nominal
4	petage	Numeric	8	1	Age of pet	None	None	8	Right	Scale
5	sexofpet	Numeric	8	0	Sex of pet	{1, Male}...	None	8	Right	Nominal
6	typeofpet	Numeric	8	0	Type of animal	{1, Dog}...	None	8	Right	Nominal
7	Othertype	String	50	0	Other type of pet	None	None	8	Left	Nominal
8	petweight	Numeric	8	1	Weight of pet	None	None	8	Right	Scale
9	satisfaction	Numeric	8	0	Level of Satisfaction with owning pet	{1, Very Dissatisfied}.	None	8	Right	Ordinal
10	moneyspent	Dollar	9	2	Amount of money spent on pet per y	None	None	9	Right	Scale
11	timespent	Numeric	8	1	Amount of time spent with pet each	None	None	8	Right	Scale
12										
13										
14										
15										
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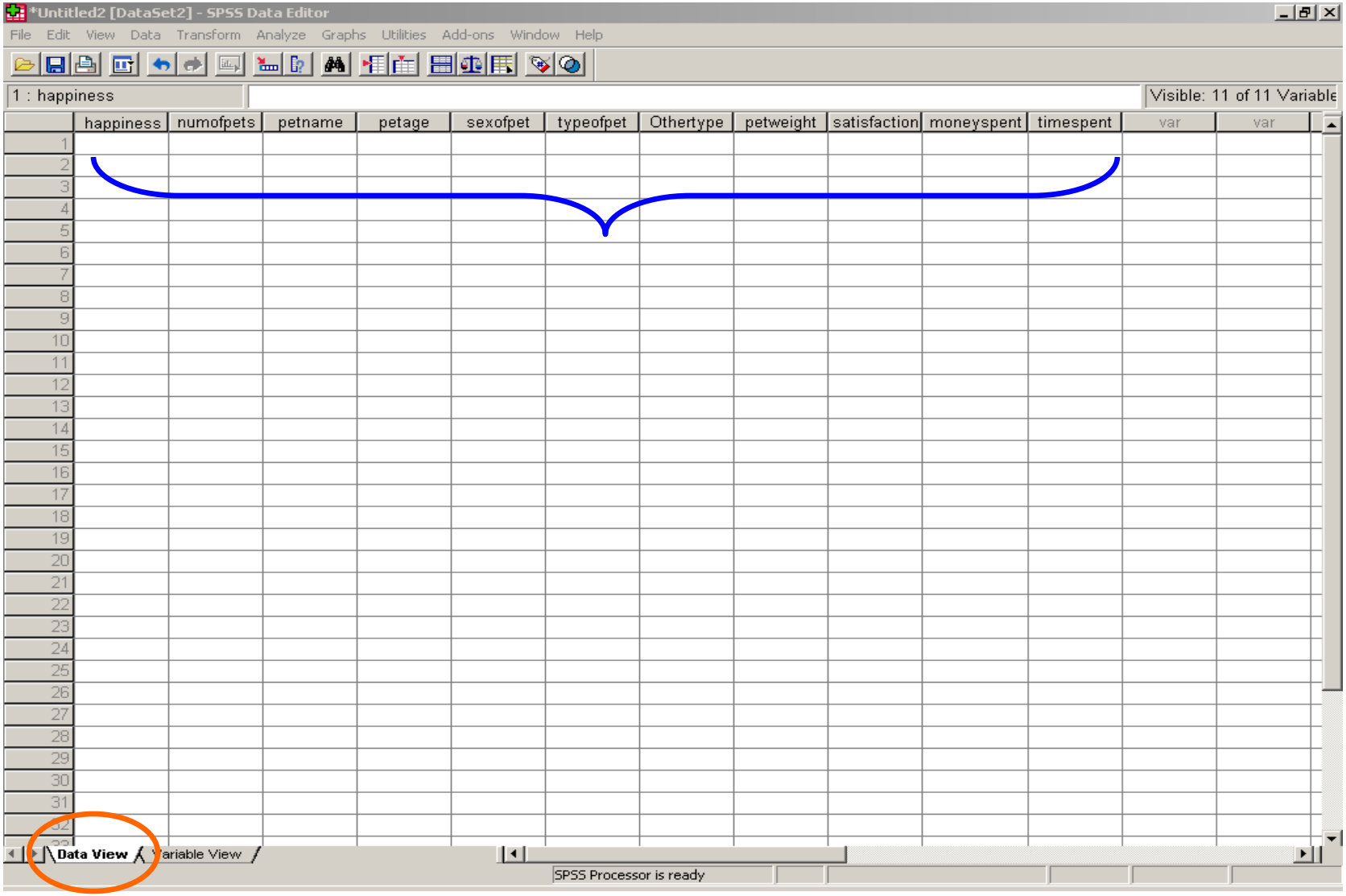
32										
33										

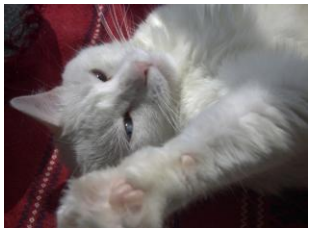
Setting Up the Variables



Pet Survey

Entering the Data

Pet Survey



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1. Please circle your average level of happiness on a scale of 1 (extremely unhappy)) to 10 (extremely happy))

   (extremely unhappy) **1** **2** **3** **4** **5** **6** **7** **8** **9** **10** (extremely happy)

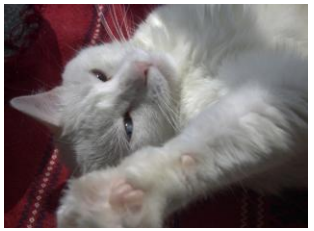
2. How many pets do you own? _____**3**_____ pets

3. What is the name of the pet you have owned the longest (or the name of your fantasy pet)? ____**Whiskers**___

The next set of questions will apply to the pet you have owned for the longest amount of time (or your fantasy pet).

4. How old is this pet? _____**3.5**____ years

Pet Survey (cont'd)



5. What is the sex of your pet? ○1 Male **x** 2 Female

6. What type of animal is this pet? ○1 Dog **x** 2 Cat ○3 Bird ○4 Fish
○5 Other, please specify _____

7. How much does your pet weigh? _____**3.5**_____lbs

8. How satisfied are you with owning this pet?

○1 Very dissatisfied ○2 Dissatisfied ○3 Neutral **x** 4 Satisfied ○5 Very satisfied

9. How much money (approximately) do you spend on this pet per year (for food, toys, vet visits, etc.)? $ _____**350.00**_____

10. How much time do you spend each week caring for, exercising or playing with your pet? _____**12.0**_____ hours

Entering Data

- Click on the **Data View** Tab at the bottom left of the Data Editor Screen
  - Type *7* in the first line under the happiness Column
  - Tab over to the numofpets Column and type *3*
  - Tab over to the petname Column and type Whiskers
  - Tab over to the petage Column and type *3.5*
  - Tab over to the sexofpet Column and type *2*
  - Tab over to the typeofpet Column and type *2*
  - Skip Othertype Column

Entering Data (cont'd)

- Tab over to the petweight Column and type *3.5*
- Tab over to the satisfaction Column and type *4*
- Tab over to the moneyspent Column and type *350*
- Tab over to the timespent Column and type *12*

- Now practice entering the data from the other surveys as well

*Untitled3 [DataSet3] - SPSS Data Editor

File Edit View Data Transform Analyze Graphs Utilities Add-ons Window Help

27 : happiness

Visible: 11 of 11 Variable

	happiness	numofpets	petname	petage	sexofpet	typeofpet	Othertype	petweight	satisfaction	moneyspent	timespent	var	var
1	7	3	Whiskers	3.5	2	2		3.5	4	$350.00	12.0		
2	5	3	Rover	2.0	1	1		45.0	5	$660.00	8.0		
3	8	2	Timmy	5.0	1	1		105.0	4	$650.00	7.0		
4	9	4	Chandler	4.0	1	1		75.0	5	$575.00	10.0		
5	8	5	Lulu	6.0	2	2		4.6	4	$400.00	15.0		
6	7	6	Missy	7.0	2	3		2.5	3	$180.00	7.5		
7	6	3	Zac	2.0	1	5	Rabbit	5.5	4	$300.00	4.0		
8	2	2	Nemo	3.0	1	4		.1	2	$150.00	3.0		
9	3	1	Shrek	4.0	1	5	Guinea Pig	2.0	2	$350.00	8.0		
10	4	4	Jaws	1.5	1	1		120.0	3	$330.00	12.5		
11	9	5	Lioness	2.0	2	1		135.0	5	$625.00	14.0		
12	9	6	Fanny	2.0	2	2		4.8	4	$300.00	9.0		
13	5	2	Mimi	7.0	2	2		5.5	4	$280.00	12.0		
14	6	1	Joe	1.0	1	1		95.0	5	$550.00	10.0		
15	7	2	Frankie	1.0	1	3		1.8	1	$100.00	5.0		
16	2	2	Simba	2.5	2	5	Rabbit	7.0	3	$225.00	6.0		
17	2	3	Max	4.0	1	1		100.0	4	$475.00	7.5		
18	3	2	Chloe	12.0	2	2		7.5	4	$150.00	6.0		
19	6	1	Sally	2.0	2	2		4.8	5	$200.00	8.0		
20	10	1	Daisy	3.0	2	4		.2	5	$100.00	3.0		
21	3	3	Hobo	4.0	1	1		95.0	4	$750.00	14.0		
22	8	5	Polly	8.0	2	3		.8	2	$175.00	2.5		
23	3	5	Oscar	6.0	1	1		130.0	5	$900.00	12.0		
24	6	2	Buster	3.0	1	1		85.0	4	$550.00	13.0		
25	4	1	Precious	1.0	2	2		5.0	3	$275.00	9.0		
26													
27													
28													
29													
30													
31													
32													

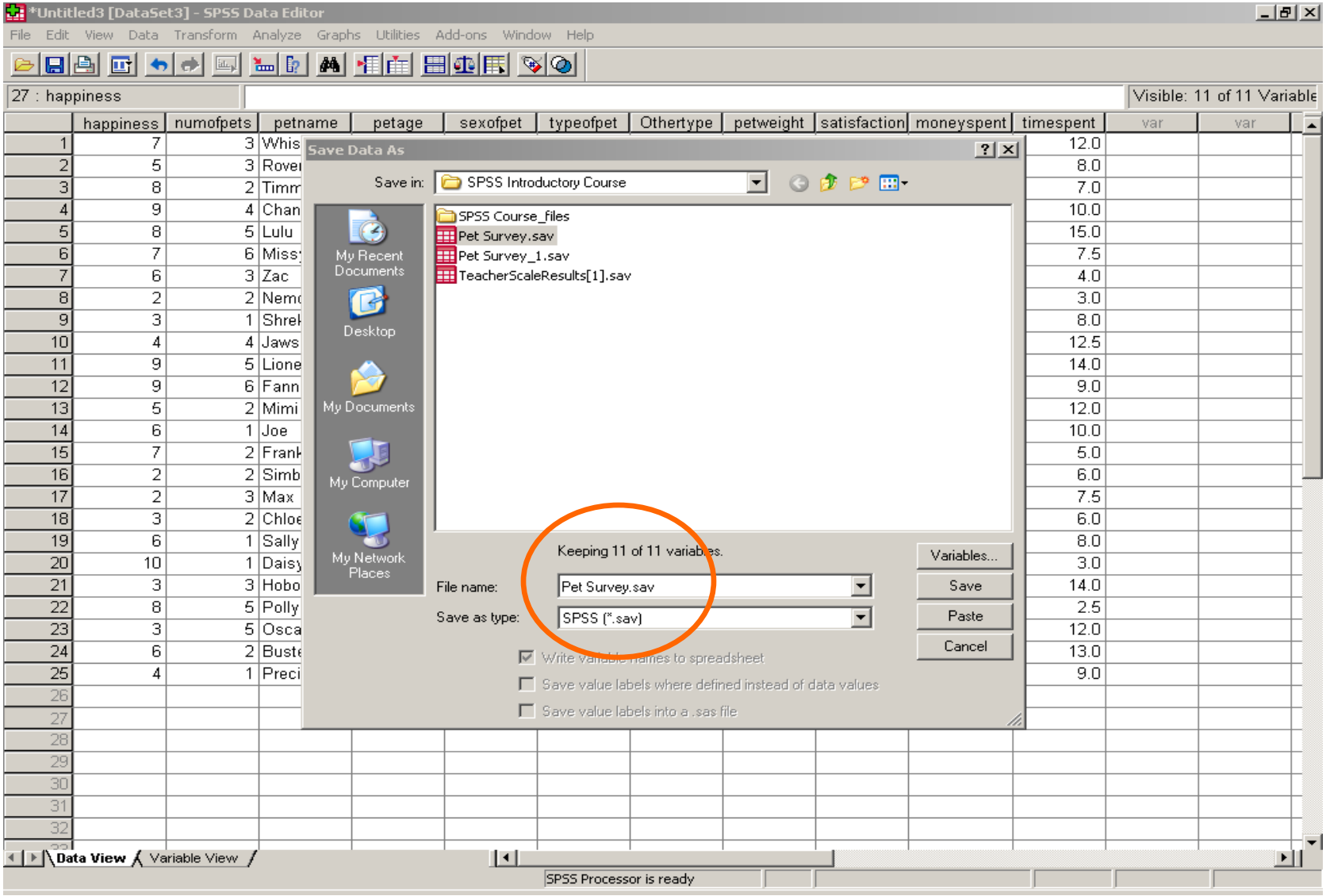
Data View | Variable View

SPSS Processor is ready

Saving Data

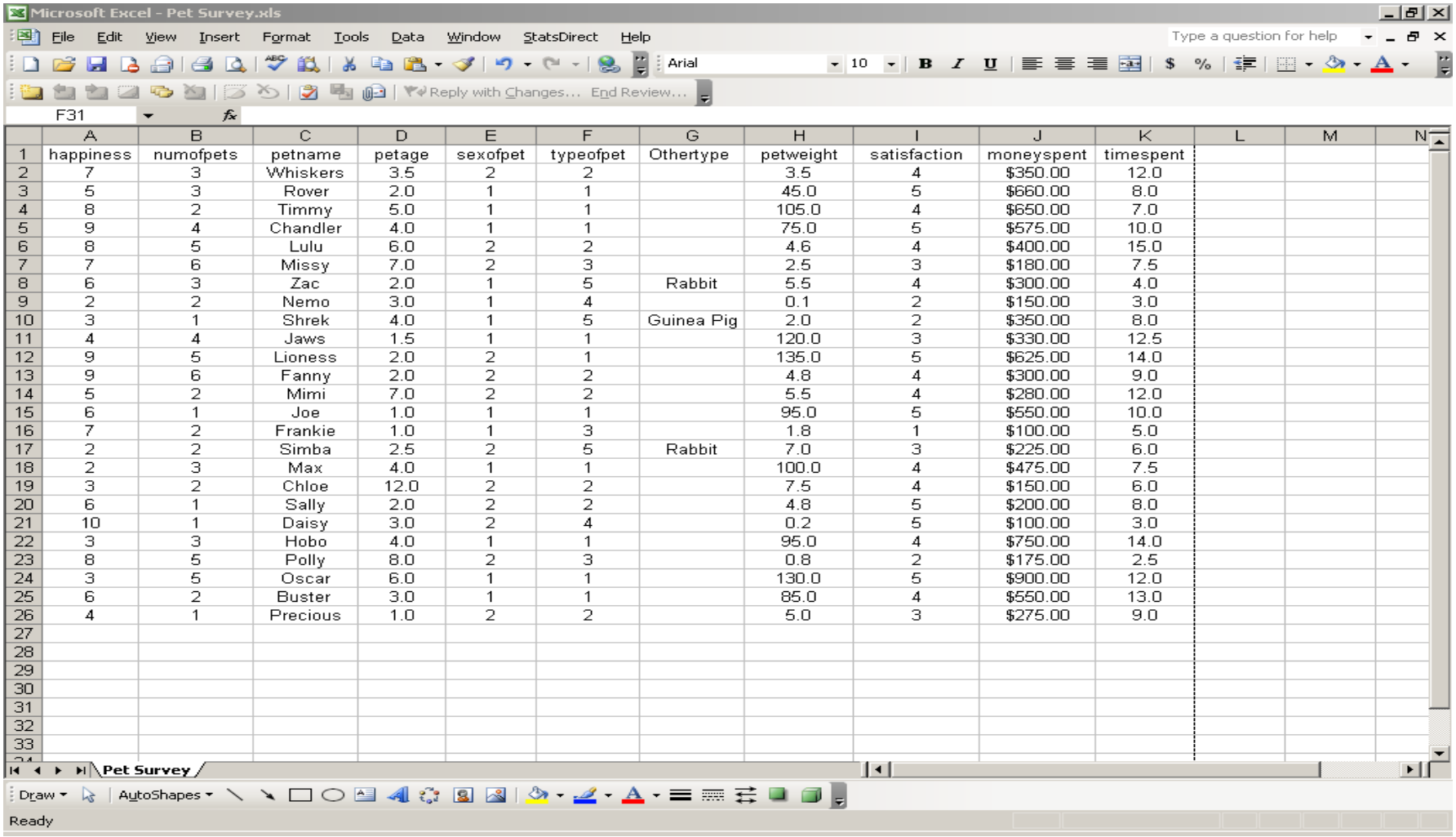
- To Save all the data from the surveys
  - Go to File > Save As
  - Choose a file location
  - Type In **Pet Survey**
  - SPSS saves the file as **Pet Survey.sav**
  - Select Save

Saving Data


*Untitled3 [DataSet3] - SPSS Data Editor
File Edit View Data Transform Analyze Graphs Utilities Add-ons Window Help
27 : happiness
Visible: 11 of 11 Variable
happiness numofpets petname petage sexofpet typeofpet Othertype petweight satisfaction moneyspent timespent var var
Save Data As
Save in: SPSS Introductory Course
SPSS Course_files
Pet Survey.sav
Pet Survey_1.sav
TeacherScaleResults[1].sav
My Recent Documents
Desktop
My Documents
My Computer
My Network Places
Keeping 11 of 11 variables.
File name: Pet Survey.sav
Save as type: SPSS (*.sav)
Variables...
Save
Paste
Cancel
Write variable names to spreadsheet
Save value labels where defined instead of data values
Save value labels into a .sas file
Data View
Variable View
SPSS Processor is ready

Session 4:
Importing Data into SPSS

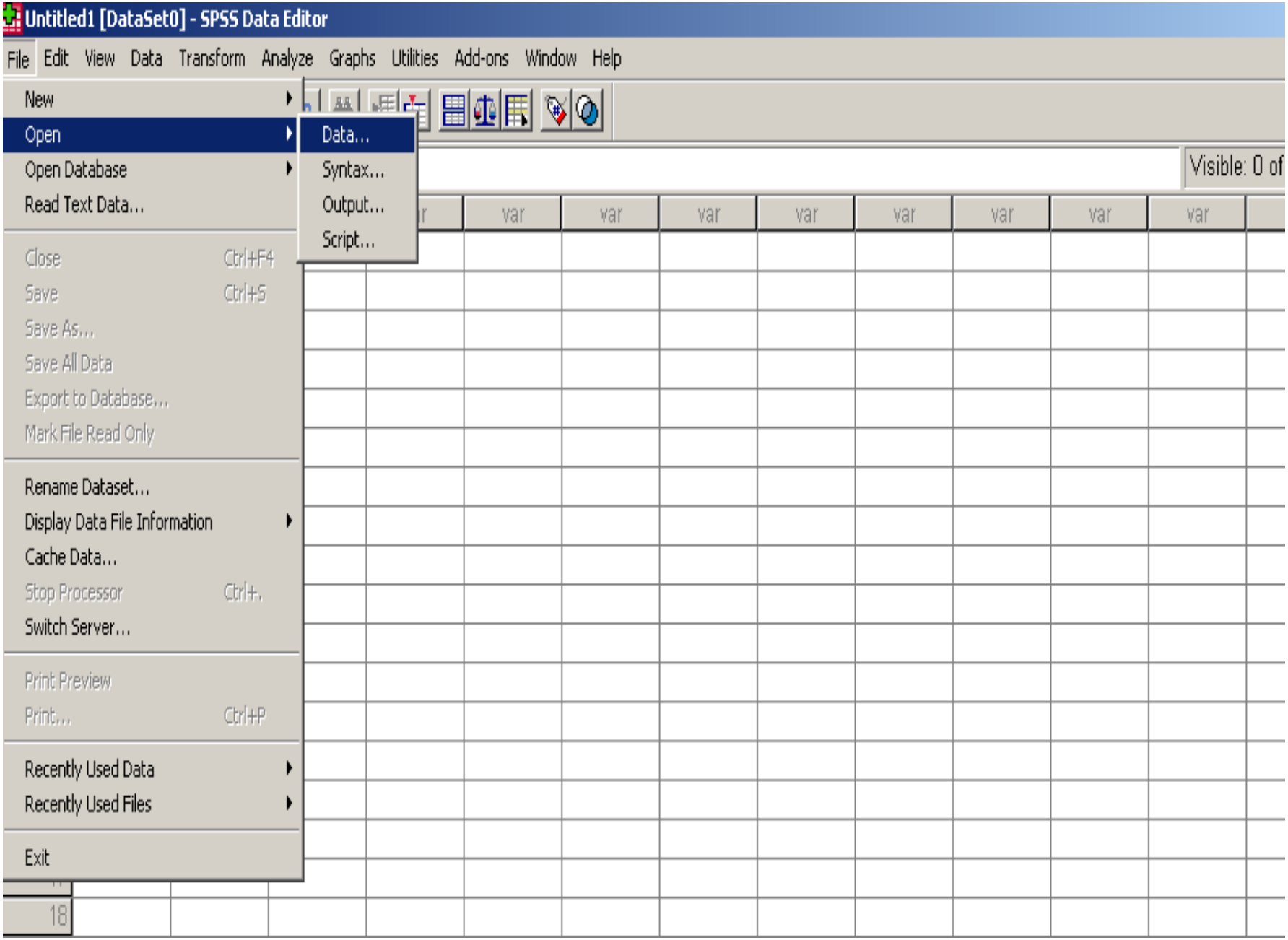
Importing an Excel File

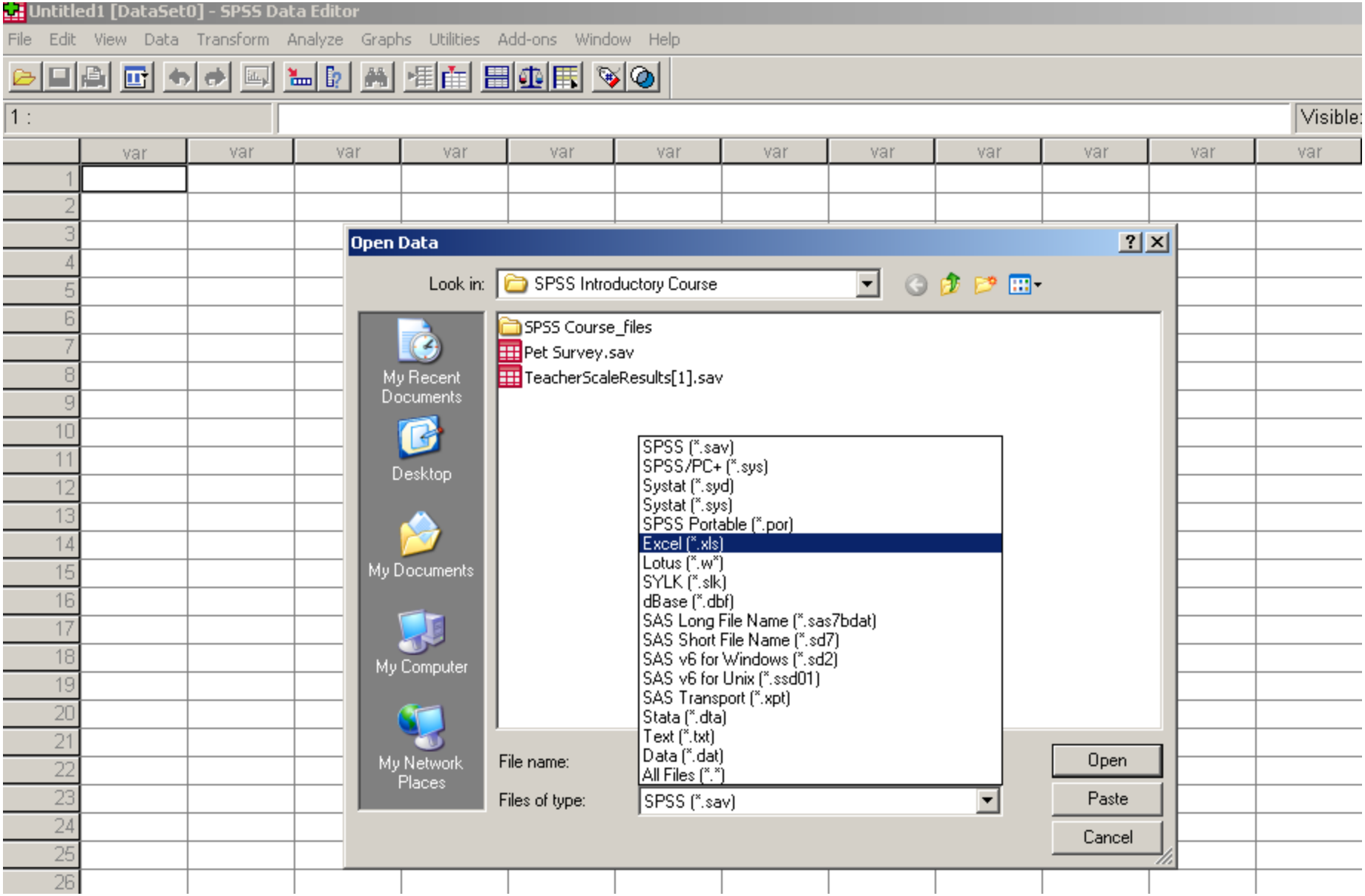


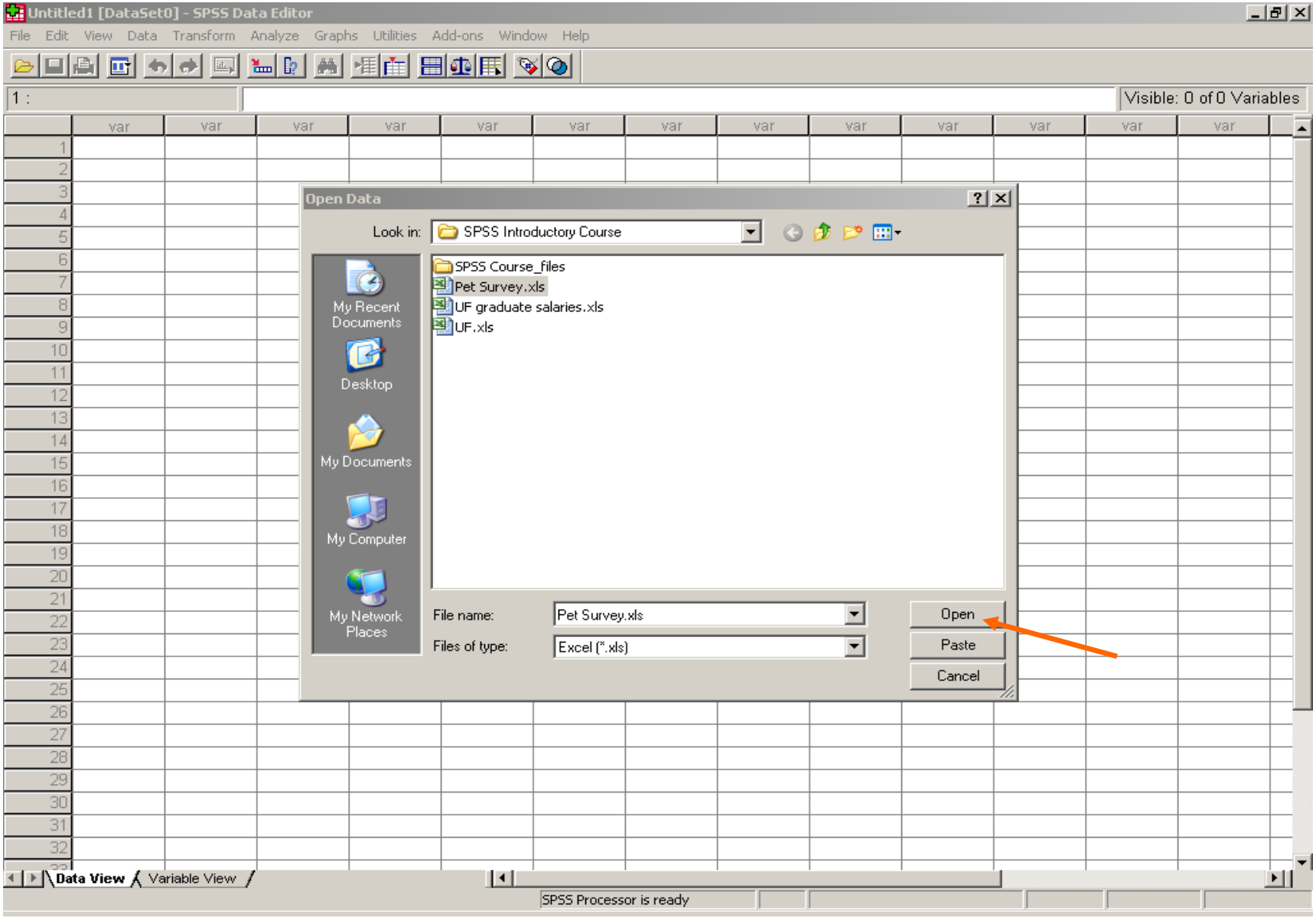
	A	B	C	D	E	F	G	H	I	J	K	L	M	N
1	happiness	numofpets	petname	petage	sexofpet	typeofpet	Othertype	petweight	satisfaction	moneyspent	timespent			
2	7	3	Whiskers	3.5	2	2		3.5	4	$350.00	12.0			
3	5	3	Rover	2.0	1	1		45.0	5	$660.00	8.0			
4	8	2	Timmy	5.0	1	1		105.0	4	$650.00	7.0			
5	9	4	Chandler	4.0	1	1		75.0	5	$575.00	10.0			
6	8	5	Lulu	6.0	2	2		4.6	4	$400.00	15.0			
7	7	6	Missy	7.0	2	3		2.5	3	$180.00	7.5			
8	6	3	Zac	2.0	1	5	Rabbit	5.5	4	$300.00	4.0			
9	2	2	Nemo	3.0	1	4		0.1	2	$150.00	3.0			
10	3	1	Shrek	4.0	1	5	Guinea Pig	2.0	2	$350.00	8.0			
11	4	4	Jaws	1.5	1	1		120.0	3	$330.00	12.5			
12	9	5	Lioness	2.0	2	1		135.0	5	$625.00	14.0			
13	9	6	Fanny	2.0	2	2		4.8	4	$300.00	9.0			
14	5	2	Mimi	7.0	2	2		5.5	4	$280.00	12.0			
15	6	1	Joe	1.0	1	1		95.0	5	$550.00	10.0			
16	7	2	Frankie	1.0	1	3		1.8	1	$100.00	5.0			
17	2	2	Simba	2.5	2	5	Rabbit	7.0	3	$225.00	6.0			
18	2	3	Max	4.0	1	1		100.0	4	$475.00	7.5			
19	3	2	Chloe	12.0	2	2		7.5	4	$150.00	6.0			
20	6	1	Sally	2.0	2	2		4.8	5	$200.00	8.0			
21	10	1	Daisy	3.0	2	4		0.2	5	$100.00	3.0			
22	3	3	Hobo	4.0	1	1		95.0	4	$750.00	14.0			
23	8	5	Polly	8.0	2	3		0.8	2	$175.00	2.5			
24	3	5	Oscar	6.0	1	1		130.0	5	$900.00	12.0			
25	6	2	Buster	3.0	1	1		85.0	4	$550.00	13.0			
26	4	1	Precious	1.0	2	2		5.0	3	$275.00	9.0			
27														
28														
29														
30														
31														
32														
33														

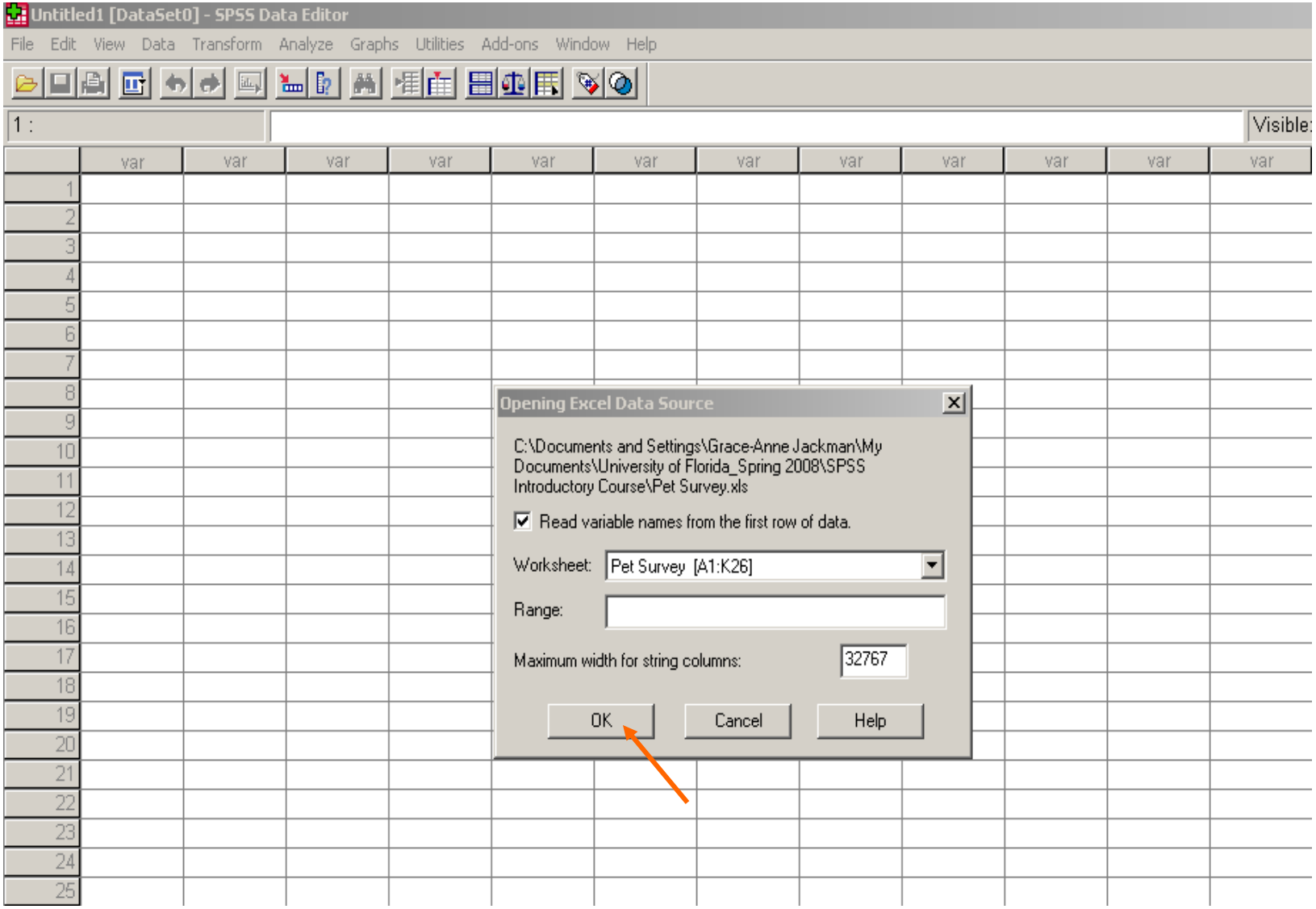
Importing an Excel File

- Select **File > Open > Data**
- Next, select the folder where the file is located via **Look in:**
- Change file type to **Excel (*.xls)**
- Select the name of the file and **click Open**
- An Excel Data Source Dialogue Box will open
  - Select box to read variables names from the first row, if the first line of the Excel spreadsheet lists the header names
  - Verify the data range
- Select **OK**
- Save File as a **SPSS (*.sav)** file


Untitled1 [DataSet0] - SPSS Data Editor
File Edit View Data Transform Analyze Graphs Utilities Add-ons Window Help
New
Open
Open Database
Read Text Data...
Close Ctrl+F4
Save Ctrl+S
Save As...
Save All Data
Export to Database...
Mark File Read Only
Rename Dataset...
Display Data File Information
Cache Data...
Stop Processor Ctrl+.
Switch Server...
Print Preview
Print... Ctrl+P
Recently Used Data
Recently Used Files
Exit
Data...
Syntax...
Output...
Script...
Visible: 0 of
var
18


Untitled1 [DataSet0] - SPSS Data Editor
File Edit View Data Transform Analyze Graphs Utilities Add-ons Window Help
1 :
Visible:
var
Open Data
Look in:
SPSS Introductory Course
My Recent Documents
Desktop
My Documents
My Computer
My Network Places
SPSS Course_files
Pet Survey.sav
TeacherScaleResults[1].sav
SPSS (*.sav)
SPSS/PC+ (*.sys)
Systat (*.syd)
Systat (*.sys)
SPSS Portable (*.por)
Excel (*.xls)
Lotus (*.w*)
SYLK (*.slk)
dBase (*.dbf)
SAS Long File Name (*.sas7bdat)
SAS Short File Name (*.sd7)
SAS v6 for Windows (*.sd2)
SAS v6 for Unix (*.ssd01)
SAS Transport (*.xpt)
Stata (*.dta)
Text (*.txt)
Data (*.dat)
All Files (*.*)
File name:
Files of type:
SPSS (*.sav)
Open
Paste
Cancel


Untitled1 [DataSet0] - SPSS Data Editor
File Edit View Data Transform Analyze Graphs Utilities Add-ons Window Help
1 :
Visible: 0 of 0 Variables
var
Open Data
Look in: SPSS Introductory Course
My Recent Documents
Desktop
My Documents
My Computer
My Network Places
SPSS Course_files
Pet Survey.xls
UF graduate salaries.xls
UF.xls
File name: Pet Survey.xls
Files of type: Excel (*.xls)
Open
Paste
Cancel
Data View
Variable View
SPSS Processor is ready

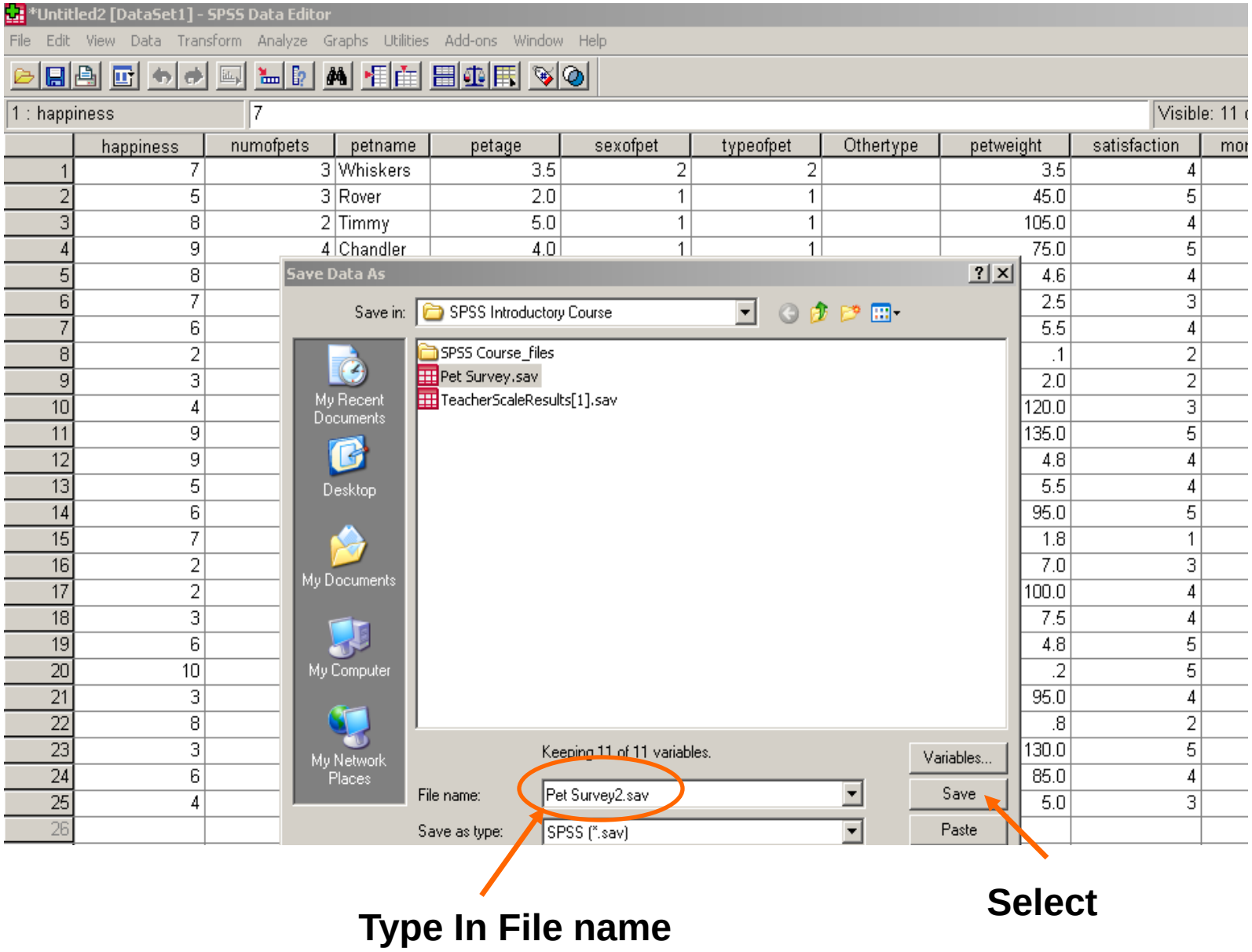

Untitled1 [DataSet0] - SPSS Data Editor
File Edit View Data Transform Analyze Graphs Utilities Add-ons Window Help
1 :
Visible:
var
Opening Excel Data Source
C:\Documents and Settings\Grace-Anne Jackman\My Documents\University of Florida_Spring 2008\SPSS Introductory Course\Pet Survey.xls
Read variable names from the first row of data.
Worksheet: Pet Survey [A1:K26]
Range:
Maximum width for string columns: 32767
OK
Cancel
Help

*Untitled2 [DataSet1] - SPSS Data Editor

File Edit View Data Transform Analyze Graphs Utilities Add-ons Window Help

1 : happiness | 7 | Visible: 11 o

	happiness	numofpets	petname	petage	sexofpet	typeofpet	Othertype	petweight	satisfaction	mon
1	7	3	Whiskers	3.5	2	2		3.5	4	
2	5	3	Rover	2.0	1	1		45.0	5	
3	8	2	Timmy	5.0	1	1		105.0	4	
4	9	4	Chandler	4.0	1	1		75.0	5	
5	8	5	Lulu	6.0	2	2		4.6	4	
6	7	6	Missy	7.0	2	3		2.5	3	
7	6	3	Zac	2.0	1	5	Rabbit	5.5	4	
8	2	2	Nemo	3.0	1	4		.1	2	
9	3	1	Shrek	4.0	1	5	Guinea Pig	2.0	2	
10	4	4	Jaws	1.5	1	1		120.0	3	
11	9	5	Lioness	2.0	2	1		135.0	5	
12	9	6	Fanny	2.0	2	2		4.8	4	
13	5	2	Mimi	7.0	2	2		5.5	4	
14	6	1	Joe	1.0	1	1		95.0	5	
15	7	2	Frankie	1.0	1	3		1.8	1	
16	2	2	Simba	2.5	2	5	Rabbit	7.0	3	
17	2	3	Max	4.0	1	1		100.0	4	
18	3	2	Chloe	12.0	2	2		7.5	4	
19	6	1	Sally	2.0	2	2		4.8	5	
20	10	1	Daisy	3.0	2	4		.2	5	
21	3	3	Hobo	4.0	1	1		95.0	4	
22	8	5	Polly	8.0	2	3		.8	2	
23	3	5	Oscar	6.0	1	1		130.0	5	
24	6	2	Buster	3.0	1	1		85.0	4	
25	4	1	Precious	1.0	2	2		5.0	3	
26										


*Untitled2 [DataSet1] - SPSS Data Editor
File Edit View Data Transform Analyze Graphs Utilities Add-ons Window Help
1 : happiness
7
Visible: 11
happiness numofpets petname petage sexofpet typeofpet Othertype petweight satisfaction
1 7 3 Whiskers 3.5 2 2 3.5 4
2 5 3 Rover 2.0 1 1 45.0 5
3 8 2 Timmy 5.0 1 1 105.0 4
4 9 4 Chandler 4.0 1 1 75.0 5
5 8 4.6 4
6 7 2.5 3
7 6 5.5 4
8 2 .1 2
9 3 2.0 2
10 4 120.0 3
11 9 135.0 5
12 9 4.8 4
13 5 5.5 4
14 6 95.0 5
15 7 1.8 1
16 2 7.0 3
17 2 100.0 4
18 3 7.5 4
19 6 4.8 5
20 10 .2 5
21 3 95.0 4
22 8 .8 2
23 3 130.0 5
24 6 85.0 4
25 4 5.0 3
26
Save Data As
Save in: SPSS Introductory Course
My Recent Documents
Desktop
My Documents
My Computer
My Network Places
SPSS Course_files
Pet Survey.sav
TeacherScaleResults[1].sav
Keeping 11 of 11 variables.
Variables...
File name: Pet Survey2.sav
Save
Save as type: SPSS (*.sav)
Paste
Type In File name
Select

Session 5:
Simple Data Manipulations

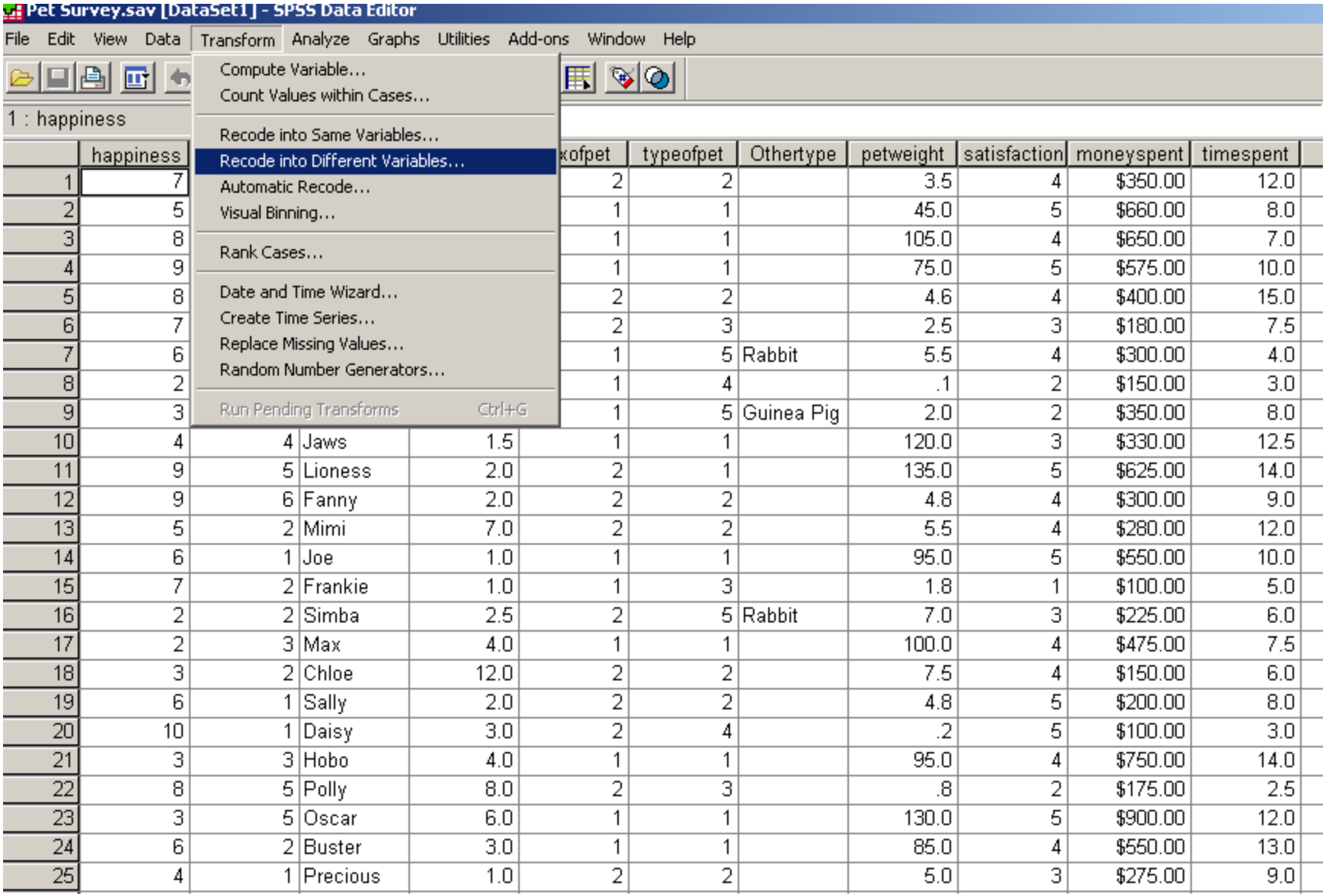
Recoding Data

- Transform and recode the quantitative variable ***petweight*** into an ordinal variable with three new categories
  - Small
  - Medium
  - Large

Recoding Data

- Select **Transform > Recode Into a Different Variables** in order to create a new variable
  - Choosing Recoding Into Same Variables will overwrite the existing data in petweight. This is not the recommended action.

- A "**Recode Into a Different Variables**" dialog box will appear


Pet Survey.sav [DataSet1] - SPSS Data Editor
File Edit View Data Transform Analyze Graphs Utilities Add-ons Window Help
Compute Variable...
Count Values within Cases...
Recode into Same Variables...
Recode into Different Variables...
Automatic Recode...
Visual Binning...
Rank Cases...
Date and Time Wizard...
Create Time Series...
Replace Missing Values...
Random Number Generators...
Run Pending Transforms Ctrl+G
1 : happiness
happiness
xofpet typeofpet Othertype petweight satisfaction moneyspent timespent
1 7 2 2 3.5 4 $350.00 12.0
2 5 1 1 45.0 5 $660.00 8.0
3 8 1 1 105.0 4 $650.00 7.0
4 9 1 1 75.0 5 $575.00 10.0
5 8 2 2 4.6 4 $400.00 15.0
6 7 2 3 2.5 3 $180.00 7.5
7 6 1 5 Rabbit 5.5 4 $300.00 4.0
8 2 1 4 .1 2 $150.00 3.0
9 3 1 5 Guinea Pig 2.0 2 $350.00 8.0
10 4 4 Jaws 1.5 1 1 120.0 3 $330.00 12.5
11 9 5 Lioness 2.0 2 1 135.0 5 $625.00 14.0
12 9 6 Fanny 2.0 2 2 4.8 4 $300.00 9.0
13 5 2 Mimi 7.0 2 2 5.5 4 $280.00 12.0
14 6 1 Joe 1.0 1 1 95.0 5 $550.00 10.0
15 7 2 Frankie 1.0 1 3 1.8 1 $100.00 5.0
16 2 2 Simba 2.5 2 5 Rabbit 7.0 3 $225.00 6.0
17 2 3 Max 4.0 1 1 100.0 4 $475.00 7.5
18 3 2 Chloe 12.0 2 2 7.5 4 $150.00 6.0
19 6 1 Sally 2.0 2 2 4.8 5 $200.00 8.0
20 10 1 Daisy 3.0 2 4 .2 5 $100.00 3.0
21 3 3 Hobo 4.0 1 1 95.0 4 $750.00 14.0
22 8 5 Polly 8.0 2 3 .8 2 $175.00 2.5
23 3 5 Oscar 6.0 1 1 130.0 5 $900.00 12.0
24 6 2 Buster 3.0 1 1 85.0 4 $550.00 13.0
25 4 1 Precious 1.0 2 2 5.0 3 $275.00 9.0

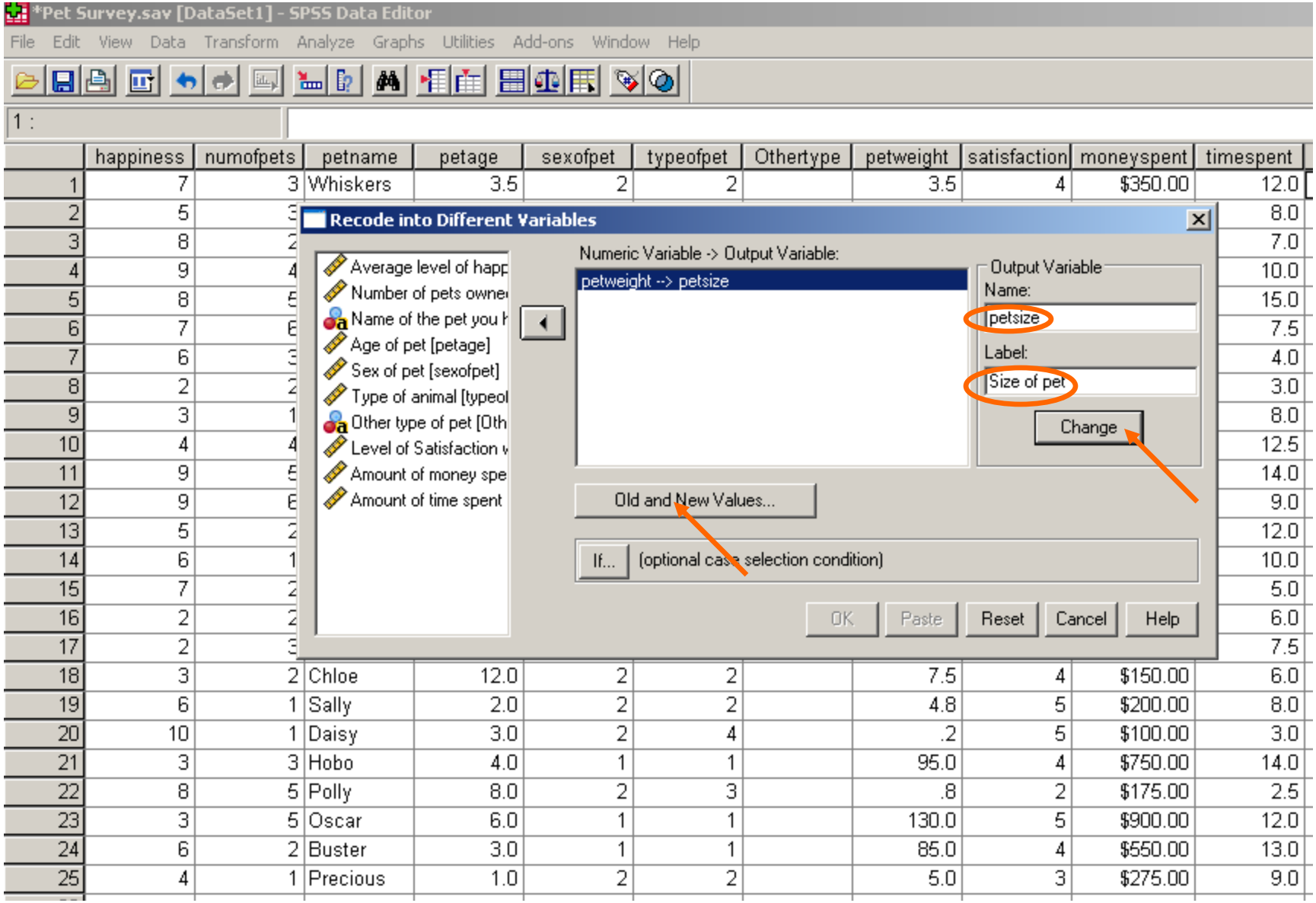
Recoding Data

- Highlight the variable ***petweight*** and use the arrow to move that variable into the *Input Variable* → *Output Variable* box.

- In the ***Name*** box under the ***Output Variable*** section, type the new variable name ***petsize*** and type the Variable Label ***Size of pet***, then Click the **CHANGE button**

- Select the Old and New Values Button. This tell SPSS how to recode the data into our 3 new categories

- Another Dialog window will appear



	happiness	numofpets	petname	petage	sexofpet	typeofpet	Othertype	petweight	satisfaction	moneyspent	timespent
1	7	3	Whiskers	3.5	2	2		3.5	4	$350.00	12.0
2	5	3									8.0
3	8	2									7.0
4	9	4									10.0
5	8	5									15.0
6	7	6									7.5
7	6	3									4.0
8	2	2									3.0
9	3	1									8.0
10	4	4									12.5
11	9	5									14.0
12	9	6									9.0
13	5	2									12.0
14	6	1									10.0
15	7	2									5.0
16	2	2									6.0
17	2	3									7.5
18	3	2	Chloe	12.0	2	2		7.5	4	$150.00	6.0
19	6	1	Sally	2.0	2	2		4.8	5	$200.00	8.0
20	10	1	Daisy	3.0	2	4		.2	5	$100.00	3.0
21	3	3	Hobo	4.0	1	1		95.0	4	$750.00	14.0
22	8	5	Polly	8.0	2	3		.8	2	$175.00	2.5
23	3	5	Oscar	6.0	1	1		130.0	5	$900.00	12.0
24	6	2	Buster	3.0	1	1		85.0	4	$550.00	13.0
25	4	1	Precious	1.0	2	2		5.0	3	$275.00	9.0

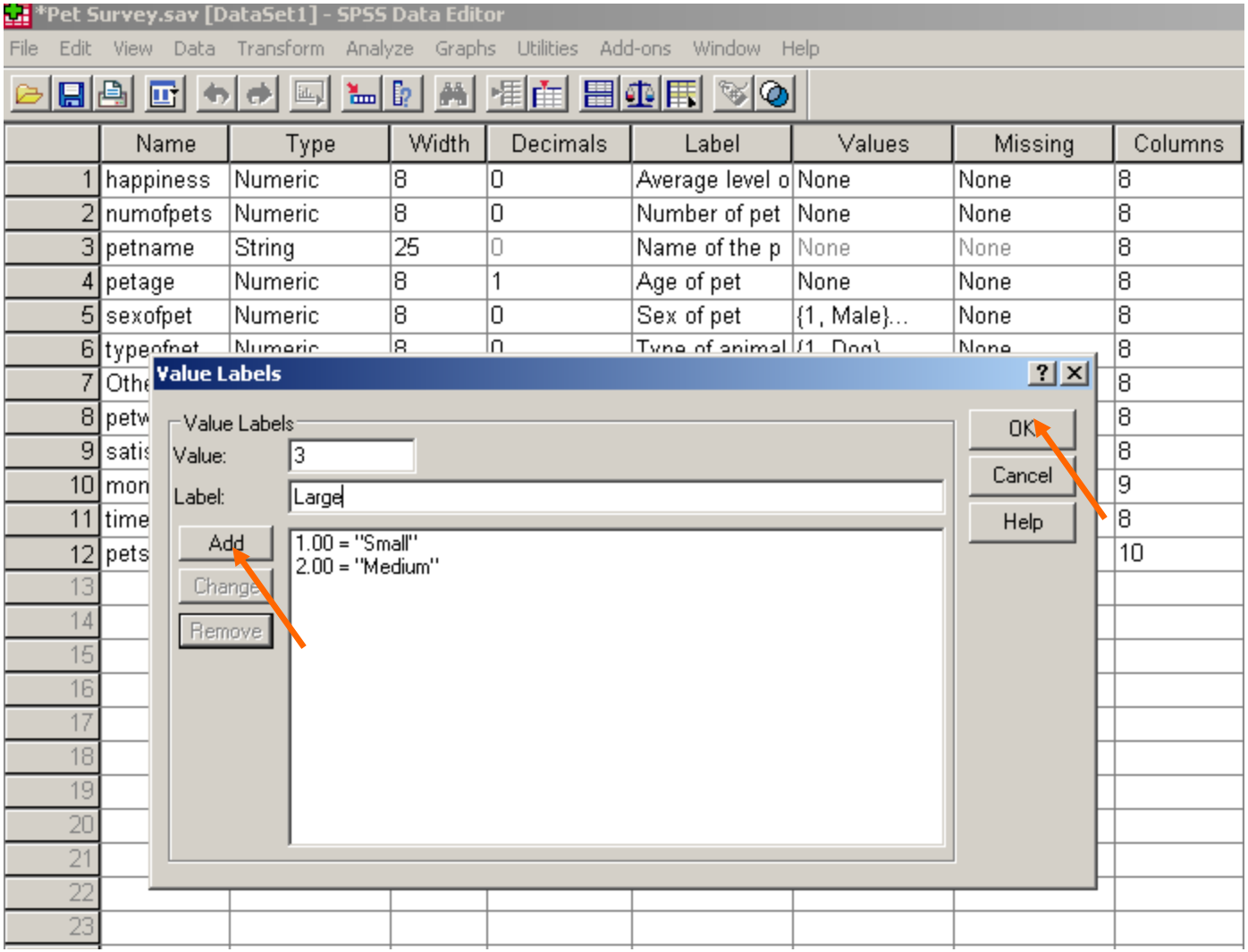
Recoding Data

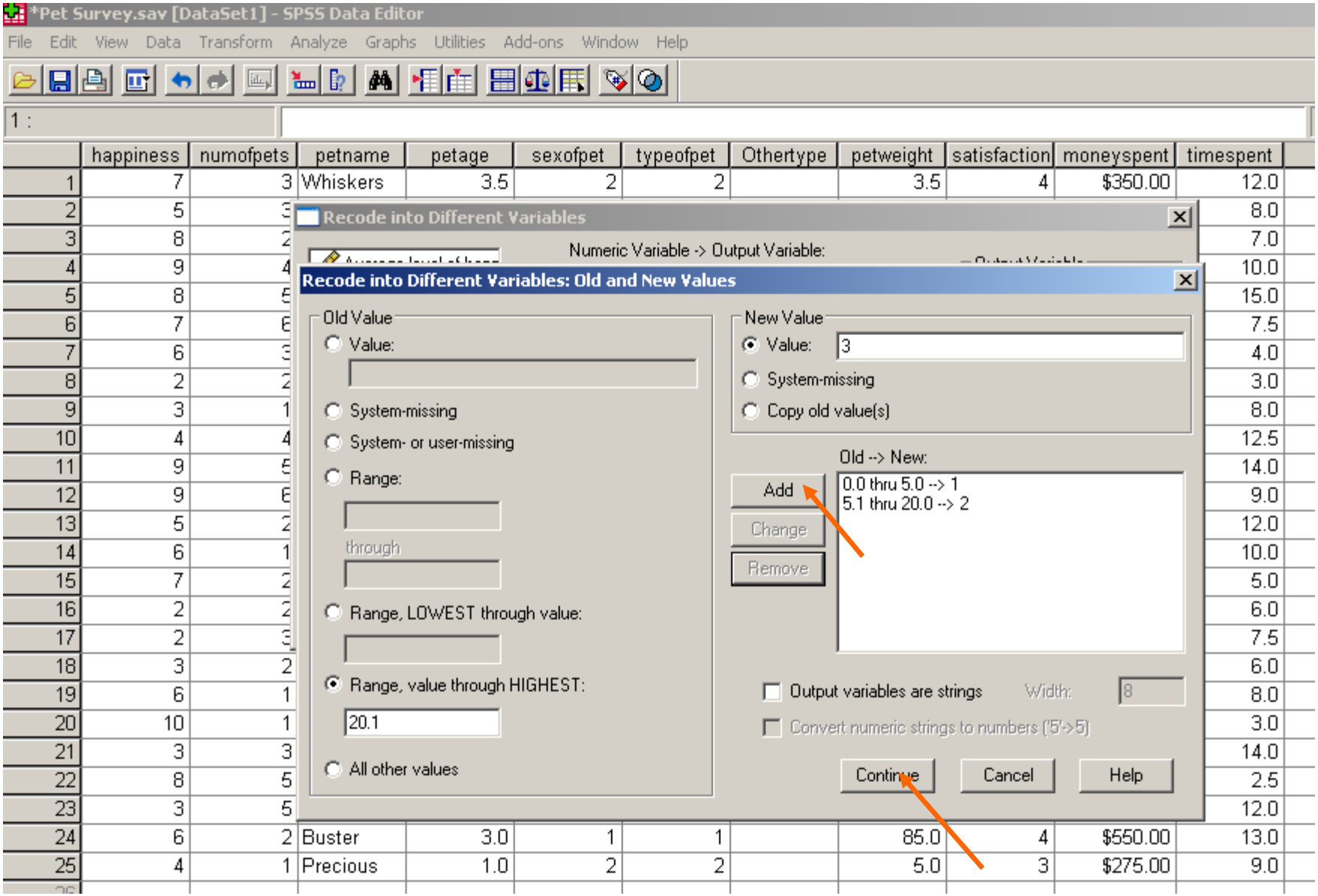
- Select ***Range…through***
  - Type in **0.0** in the top box and **5.0** in the box under *through*
  - Type **1** in the Value box under the New Value section, the click **ADD**

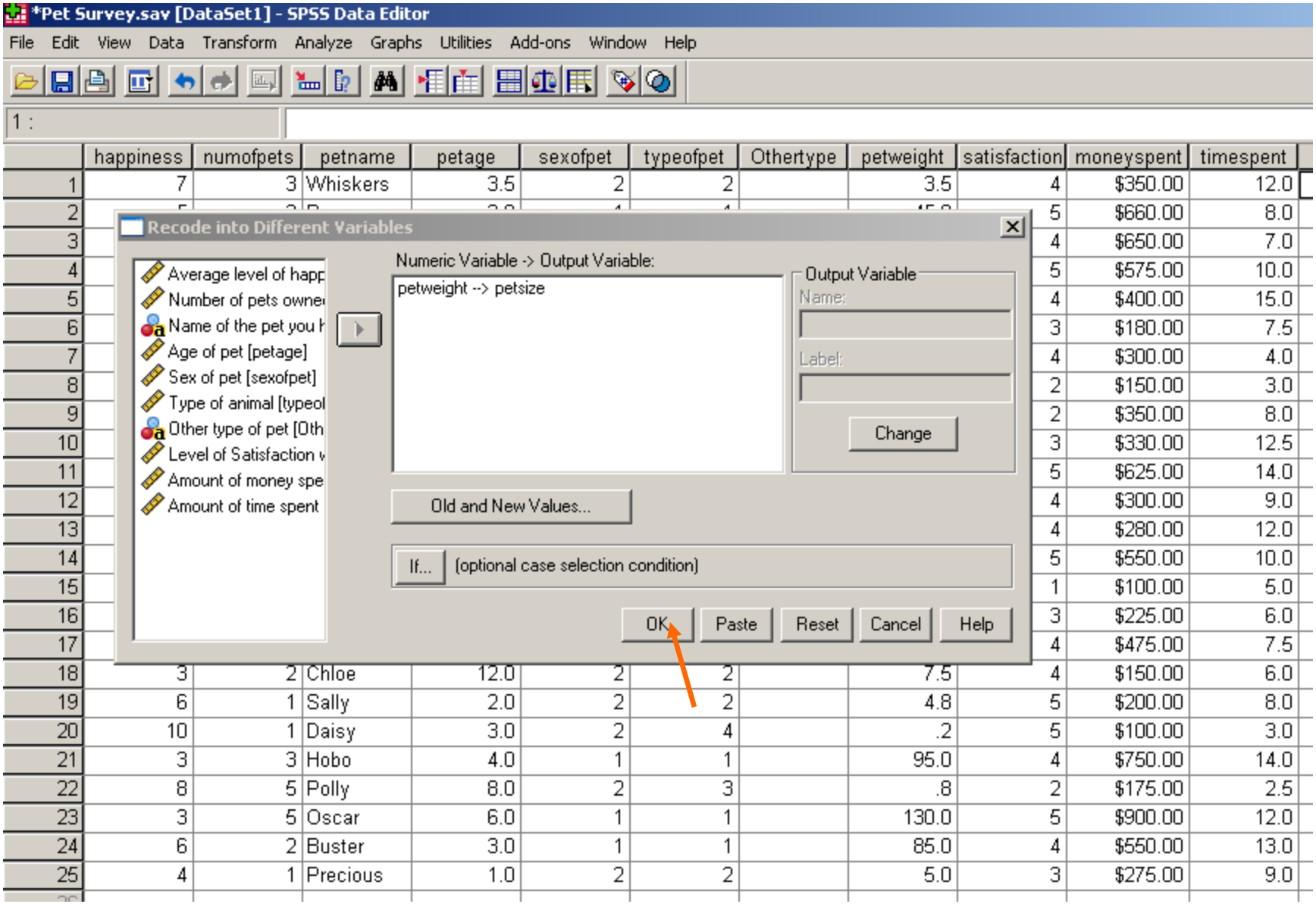
- Select ***Range…through***
  - Type in **5.1** in the top box and **20.0** in the box under *through*
  - Type **2** in the Value box under the New Value section, the click **ADD**

- Select ***Range, value through HIGHEST***
  - Type in **20.1**
  - Type **3** in the Value box under the New Value section, the click **ADD**

- Next, select **CONTINUE**, then click **OK**

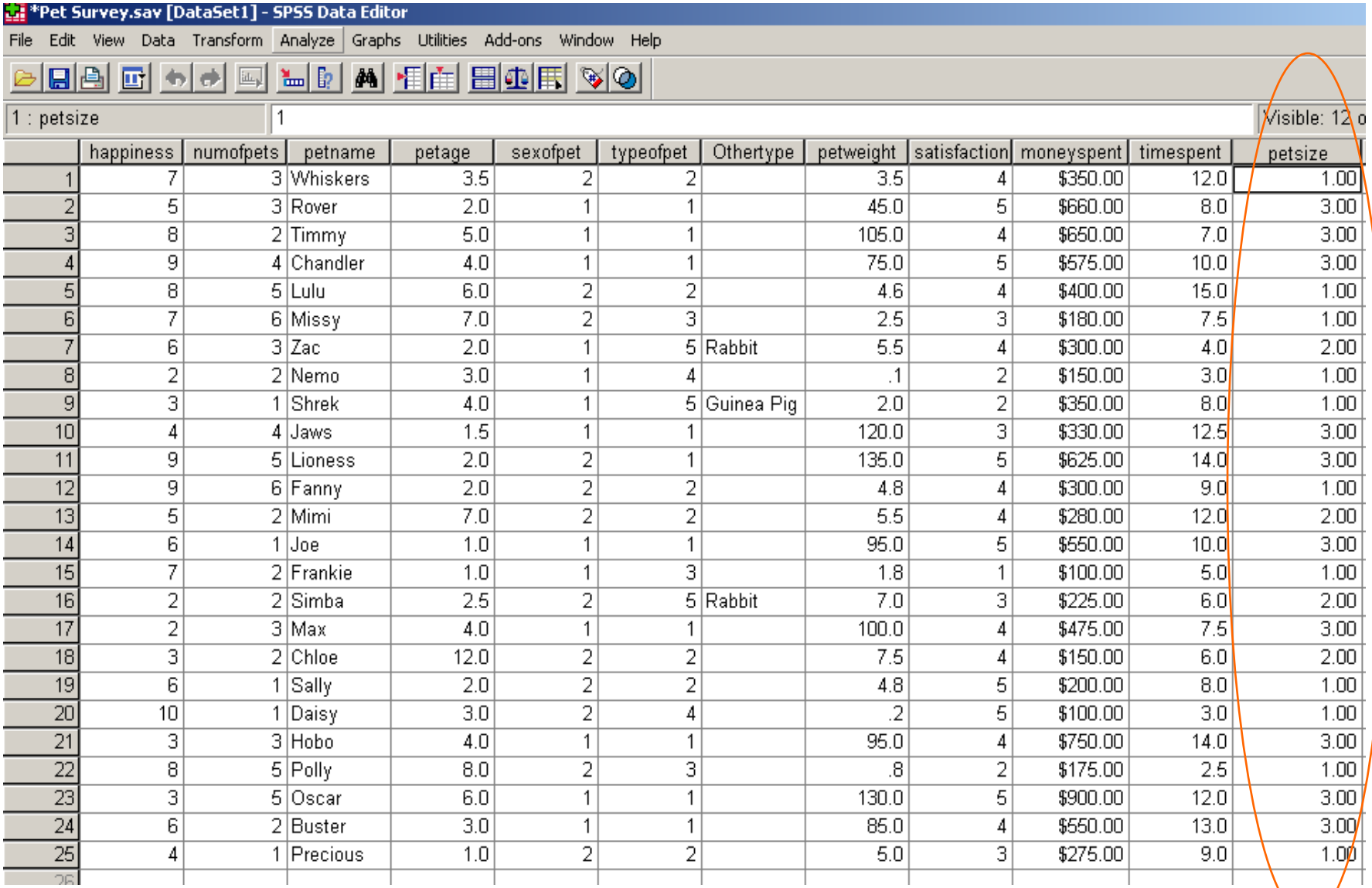

*Pet Survey.sav [DataSet1] - SPSS Data Editor
File Edit View Data Transform Analyze Graphs Utilities Add-ons Window Help
Name Type Width Decimals Label Values Missing Columns
1 happiness Numeric 8 0 Average level o None None 8
2 numofpets Numeric 8 0 Number of pet None None 8
3 petname String 25 0 Name of the p None None 8
4 petage Numeric 8 1 Age of pet None None 8
5 sexofpet Numeric 8 0 Sex of pet {1, Male}... None 8
6 typeofpet Numeric 8 0 Type of animal {1, Dog} None 8
7 Othe 8
8 petw 8
9 satis 8
10 mon 9
11 time 8
12 pets 10
Value Labels
Value Labels
Value: 3
Label: Large
Add
Change
Remove
1.00 = "Small"
2.00 = "Medium"
OK
Cancel
Help


*Pet Survey.sav [DataSet1] - SPSS Data Editor
File Edit View Data Transform Analyze Graphs Utilities Add-ons Window Help
1 :
happiness numofpets petname petage sexofpet typeofpet Othertype petweight satisfaction moneyspent timespent
1 7 3 Whiskers 3.5 2 2 3.5 4 $350.00 12.0
2 5 3 8.0
3 8 2 7.0
4 9 4 10.0
5 8 5 15.0
6 7 6 7.5
7 6 3 4.0
8 2 2 3.0
9 3 1 8.0
10 4 4 12.5
11 9 5 14.0
12 9 6 9.0
13 5 2 12.0
14 6 1 10.0
15 7 2 5.0
16 2 2 6.0
17 2 3 7.5
18 3 2 6.0
19 6 1 8.0
20 10 1 3.0
21 3 3 14.0
22 8 5 2.5
23 3 5 12.0
24 6 2 Buster 3.0 1 1 85.0 4 $550.00 13.0
25 4 1 Precious 1.0 2 2 5.0 3 $275.00 9.0
Recode into Different Variables
Numeric Variable -> Output Variable:
Recode into Different Variables: Old and New Values
Old Value
Value:
System-missing
System- or user-missing
Range:
through
Range, LOWEST through value:
Range, value through HIGHEST:
20.1
All other values
New Value
Value: 3
System-missing
Copy old value(s)
Old --> New:
0.0 thru 5.0 --> 1
5.1 thru 20.0 --> 2
Add
Change
Remove
Output variables are strings
Width:
8
Convert numeric strings to numbers ('5'->5)
Continue
Cancel
Help



	happiness	numofpets	petname	petage	sexofpet	typeofpet	Othertype	petweight	satisfaction	moneyspent	timespent
1	7	3	Whiskers	3.5	2	2		3.5	4	$350.00	12.0
2									5	$660.00	8.0
3									4	$650.00	7.0
4									5	$575.00	10.0
5									4	$400.00	15.0
6									3	$180.00	7.5
7									4	$300.00	4.0
8									2	$150.00	3.0
9									2	$350.00	8.0
10									3	$330.00	12.5
11									5	$625.00	14.0
12									4	$300.00	9.0
13									4	$280.00	12.0
14									5	$550.00	10.0
15									1	$100.00	5.0
16									3	$225.00	6.0
17									4	$475.00	7.5
18	3	2	Chloe	12.0	2	2		7.5	4	$150.00	6.0
19	6	1	Sally	2.0	2	2		4.8	5	$200.00	8.0
20	10	1	Daisy	3.0	2	4		.2	5	$100.00	3.0
21	3	3	Hobo	4.0	1	1		95.0	4	$750.00	14.0
22	8	5	Polly	8.0	2	3		.8	2	$175.00	2.5
23	3	5	Oscar	6.0	1	1		130.0	5	$900.00	12.0
24	6	2	Buster	3.0	1	1		85.0	4	$550.00	13.0
25	4	1	Precious	1.0	2	2		5.0	3	$275.00	9.0

In Data View, the new variable, ***petsize***, will now appear as the last column in the variables



*Pet Survey.sav [DataSet1] - SPSS Data Editor

File Edit View Data Transform Analyze Graphs Utilities Add-ons Window Help

1 : petsize | 1 | Visible: 12

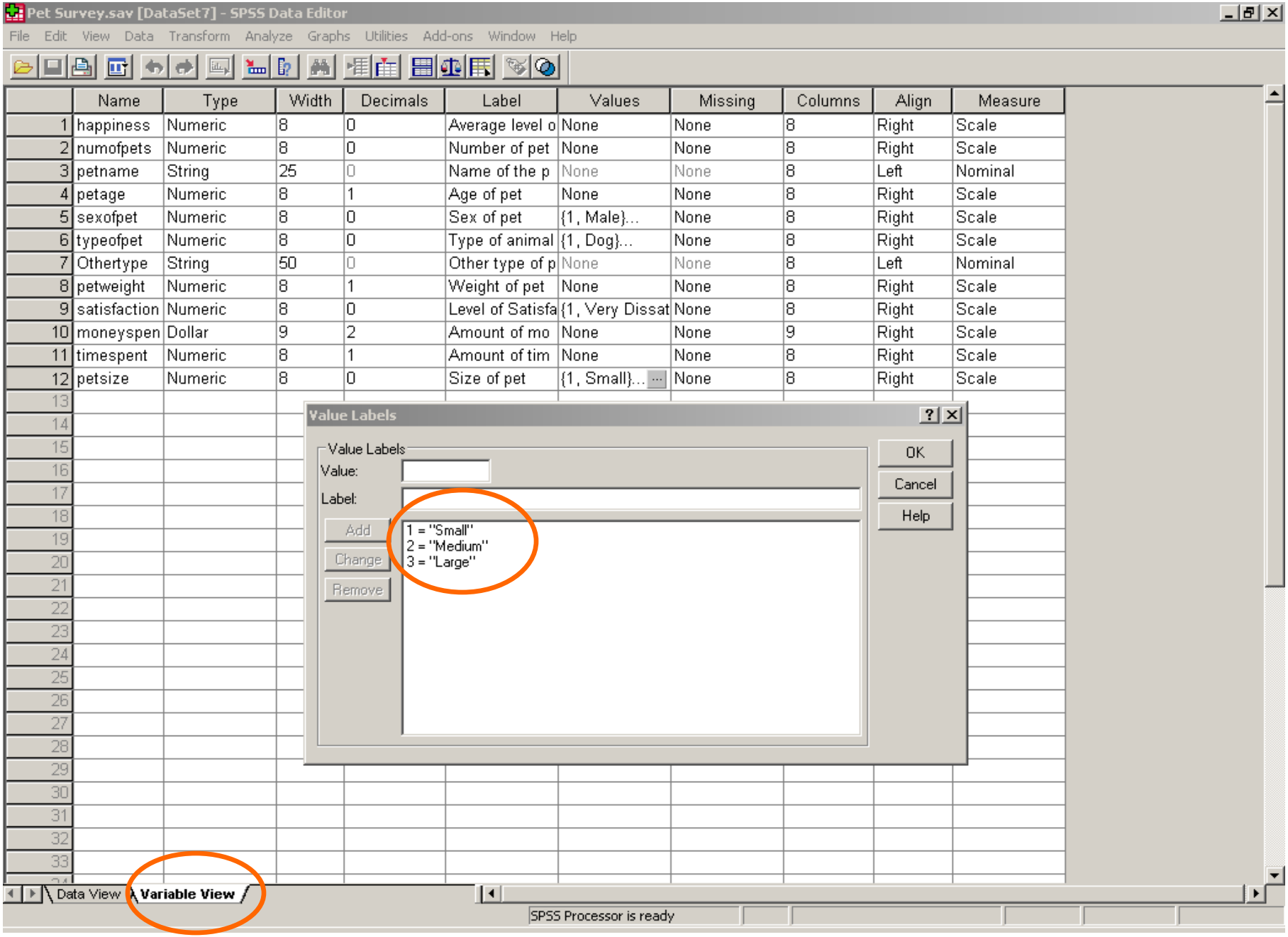
	happiness	numofpets	petname	petage	sexofpet	typeofpet	Othertype	petweight	satisfaction	moneyspent	timespent	petsize
1	7	3	Whiskers	3.5	2	2		3.5	4	$350.00	12.0	1.00
2	5	3	Rover	2.0	1	1		45.0	5	$660.00	8.0	3.00
3	8	2	Timmy	5.0	1	1		105.0	4	$650.00	7.0	3.00
4	9	4	Chandler	4.0	1	1		75.0	5	$575.00	10.0	3.00
5	8	5	Lulu	6.0	2	2		4.6	4	$400.00	15.0	1.00
6	7	6	Missy	7.0	2	3		2.5	3	$180.00	7.5	1.00
7	6	3	Zac	2.0	1	5	Rabbit	5.5	4	$300.00	4.0	2.00
8	2	2	Nemo	3.0	1	4		.1	2	$150.00	3.0	1.00
9	3	1	Shrek	4.0	1	5	Guinea Pig	2.0	2	$350.00	8.0	1.00
10	4	4	Jaws	1.5	1	1		120.0	3	$330.00	12.5	3.00
11	9	5	Lioness	2.0	2	1		135.0	5	$625.00	14.0	3.00
12	9	6	Fanny	2.0	2	2		4.8	4	$300.00	9.0	1.00
13	5	2	Mimi	7.0	2	2		5.5	4	$280.00	12.0	2.00
14	6	1	Joe	1.0	1	1		95.0	5	$550.00	10.0	3.00
15	7	2	Frankie	1.0	1	3		1.8	1	$100.00	5.0	1.00
16	2	2	Simba	2.5	2	5	Rabbit	7.0	3	$225.00	6.0	2.00
17	2	3	Max	4.0	1	1		100.0	4	$475.00	7.5	3.00
18	3	2	Chloe	12.0	2	2		7.5	4	$150.00	6.0	2.00
19	6	1	Sally	2.0	2	2		4.8	5	$200.00	8.0	1.00
20	10	1	Daisy	3.0	2	4		.2	5	$100.00	3.0	1.00
21	3	3	Hobo	4.0	1	1		95.0	4	$750.00	14.0	3.00
22	8	5	Polly	8.0	2	3		.8	2	$175.00	2.5	1.00
23	3	5	Oscar	6.0	1	1		130.0	5	$900.00	12.0	3.00
24	6	2	Buster	3.0	1	1		85.0	4	$550.00	13.0	3.00
25	4	1	Precious	1.0	2	2		5.0	3	$275.00	9.0	1.00

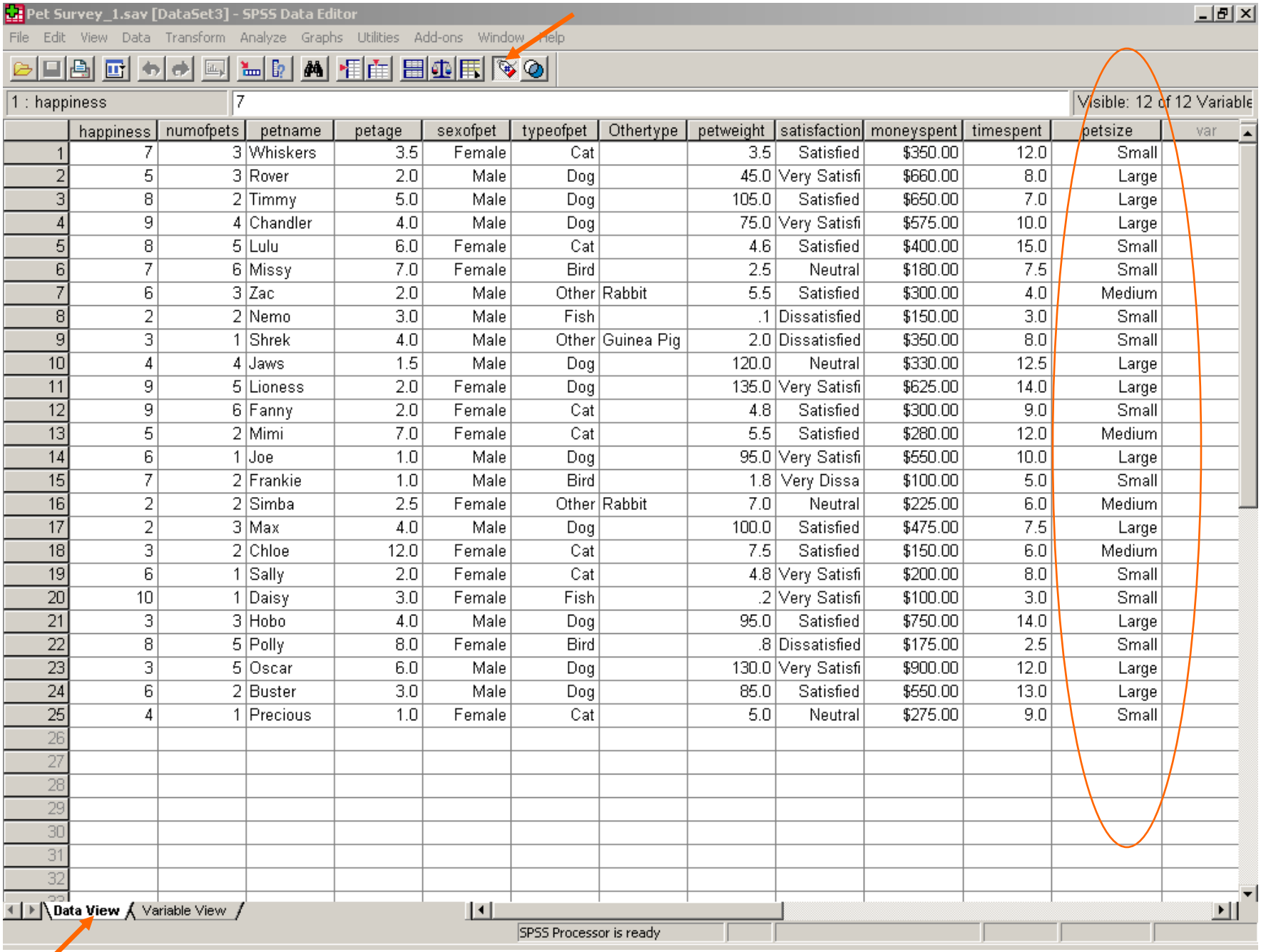
Recoding Data

- Click on the bottom left of the screen to switch to Variable View and define the values for this new variable
  - Type 1 in the *Value* box and Small in the *Label* box, click **ADD**
  - Type 2 in the *Value* box and Medium in the *Label* box, click **ADD**
  - Type 3 in the *Value* box and Large in the *Label* box, click **ADD**
  - Select ***OK***

- Change to the Data View Window to verify whether these changes have been made.

- Resave the SPSS file


Pet Survey.sav [DataSet7] - SPSS Data Editor
File Edit View Data Transform Analyze Graphs Utilities Add-ons Window Help
Name Type Width Decimals Label Values Missing Columns Align Measure
1 happiness Numeric 8 0 Average level o None None 8 Right Scale
2 numofpets Numeric 8 0 Number of pet None None 8 Right Scale
3 petname String 25 0 Name of the p None None 8 Left Nominal
4 petage Numeric 8 1 Age of pet None None 8 Right Scale
5 sexofpet Numeric 8 0 Sex of pet {1, Male}... None 8 Right Scale
6 typeofpet Numeric 8 0 Type of animal {1, Dog}... None 8 Right Scale
7 Othertype String 50 0 Other type of p None None 8 Left Nominal
8 petweight Numeric 8 1 Weight of pet None None 8 Right Scale
9 satisfaction Numeric 8 0 Level of Satisfa {1, Very Dissat None 8 Right Scale
10 moneyspen Dollar 9 2 Amount of mo None None 9 Right Scale
11 timespent Numeric 8 1 Amount of tim None None 8 Right Scale
12 petsize Numeric 8 0 Size of pet {1, Small}... None 8 Right Scale
Value Labels
Value Labels
Value:
Label:
Add
Change
Remove
1 = "Small"
2 = "Medium"
3 = "Large"
OK
Cancel
Help
Data View
Variable View
SPSS Processor is ready

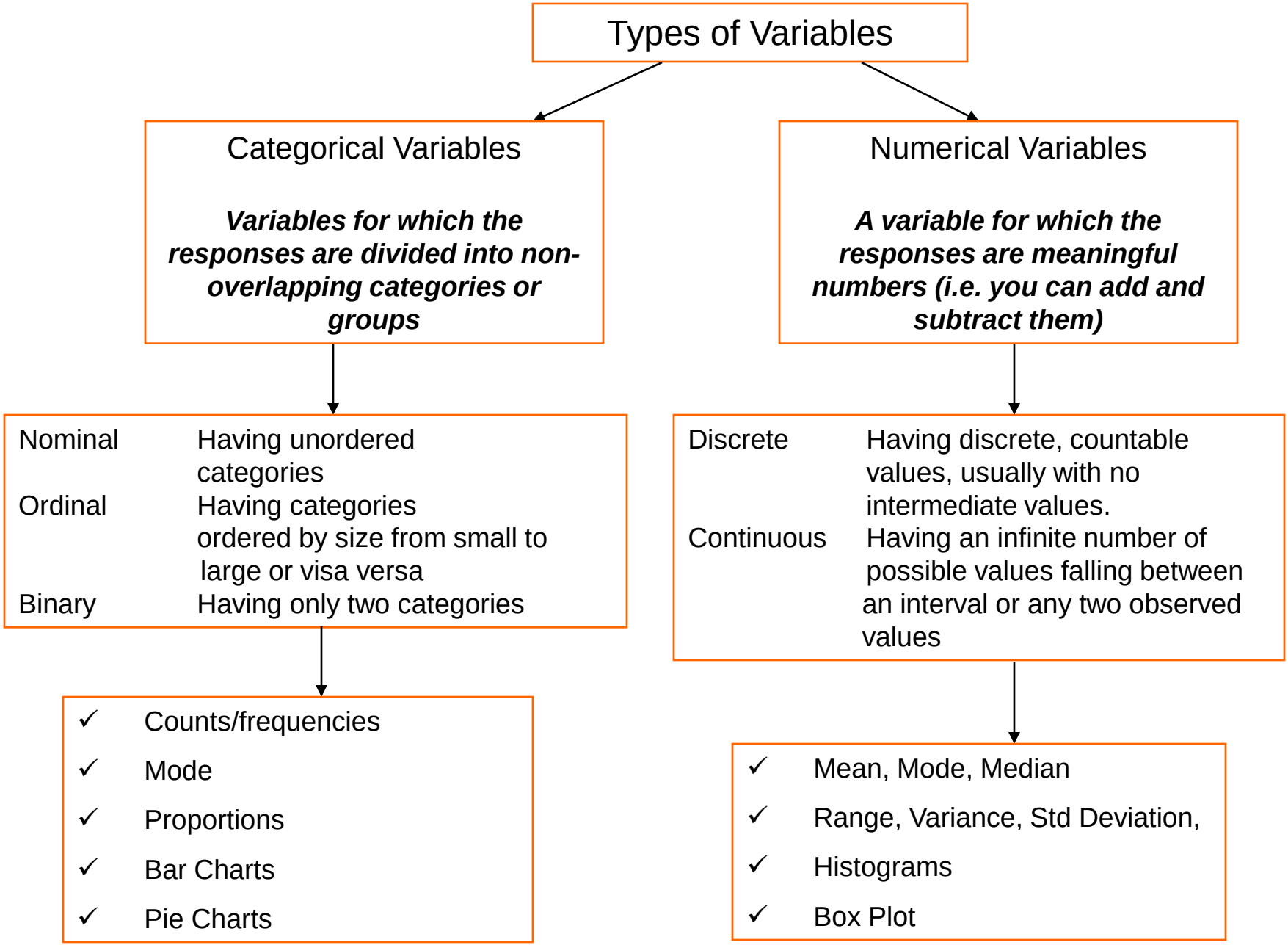


	happiness	numofpets	petname	petage	sexofpet	typeofpet	Othertype	petweight	satisfaction	moneyspent	timespent	petsize	var
1	7	3	Whiskers	3.5	Female	Cat		3.5	Satisfied	$350.00	12.0	Small	
2	5	3	Rover	2.0	Male	Dog		45.0	Very Satisfi	$660.00	8.0	Large	
3	8	2	Timmy	5.0	Male	Dog		105.0	Satisfied	$650.00	7.0	Large	
4	9	4	Chandler	4.0	Male	Dog		75.0	Very Satisfi	$575.00	10.0	Large	
5	8	5	Lulu	6.0	Female	Cat		4.6	Satisfied	$400.00	15.0	Small	
6	7	6	Missy	7.0	Female	Bird		2.5	Neutral	$180.00	7.5	Small	
7	6	3	Zac	2.0	Male	Other	Rabbit	5.5	Satisfied	$300.00	4.0	Medium	
8	2	2	Nemo	3.0	Male	Fish		.1	Dissatisfied	$150.00	3.0	Small	
9	3	1	Shrek	4.0	Male	Other	Guinea Pig	2.0	Dissatisfied	$350.00	8.0	Small	
10	4	4	Jaws	1.5	Male	Dog		120.0	Neutral	$330.00	12.5	Large	
11	9	5	Lioness	2.0	Female	Dog		135.0	Very Satisfi	$625.00	14.0	Large	
12	9	6	Fanny	2.0	Female	Cat		4.8	Satisfied	$300.00	9.0	Small	
13	5	2	Mimi	7.0	Female	Cat		5.5	Satisfied	$280.00	12.0	Medium	
14	6	1	Joe	1.0	Male	Dog		95.0	Very Satisfi	$550.00	10.0	Large	
15	7	2	Frankie	1.0	Male	Bird		1.8	Very Dissa	$100.00	5.0	Small	
16	2	2	Simba	2.5	Female	Other	Rabbit	7.0	Neutral	$225.00	6.0	Medium	
17	2	3	Max	4.0	Male	Dog		100.0	Satisfied	$475.00	7.5	Large	
18	3	2	Chloe	12.0	Female	Cat		7.5	Satisfied	$150.00	6.0	Medium	
19	6	1	Sally	2.0	Female	Cat		4.8	Very Satisfi	$200.00	8.0	Small	
20	10	1	Daisy	3.0	Female	Fish		.2	Very Satisfi	$100.00	3.0	Small	
21	3	3	Hobo	4.0	Male	Dog		95.0	Satisfied	$750.00	14.0	Large	
22	8	5	Polly	8.0	Female	Bird		.8	Dissatisfied	$175.00	2.5	Small	
23	3	5	Oscar	6.0	Male	Dog		130.0	Very Satisfi	$900.00	12.0	Large	
24	6	2	Buster	3.0	Male	Dog		85.0	Satisfied	$550.00	13.0	Large	
25	4	1	Precious	1.0	Female	Cat		5.0	Neutral	$275.00	9.0	Small	
26													
27													
28													
29													
30													
31													
32													

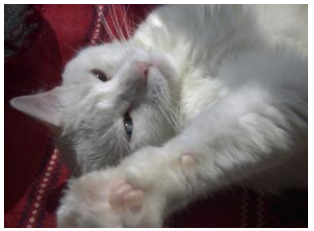
Session 6:

Performing Simple Descriptive Statistics

The type of data determines the choice of statistical analysis


Types of Variables
Categorical Variables
Variables for which the responses are divided into non-overlapping categories or groups
Numerical Variables
A variable for which the responses are meaningful numbers (i.e. you can add and subtract them)
Nominal
Having unordered categories
Ordinal
Having categories ordered by size from small to large or visa versa
Binary
Having only two categories
Discrete
Having discrete, countable values, usually with no intermediate values.
Continuous
Having an infinite number of possible values falling between an interval or any two observed values
✓ Counts/frequencies
✓ Mode
✓ Proportions
✓ Bar Charts
✓ Pie Charts
✓ Mean, Mode, Median
✓ Range, Variance, Std Deviation,
✓ Histograms
✓ Box Plot

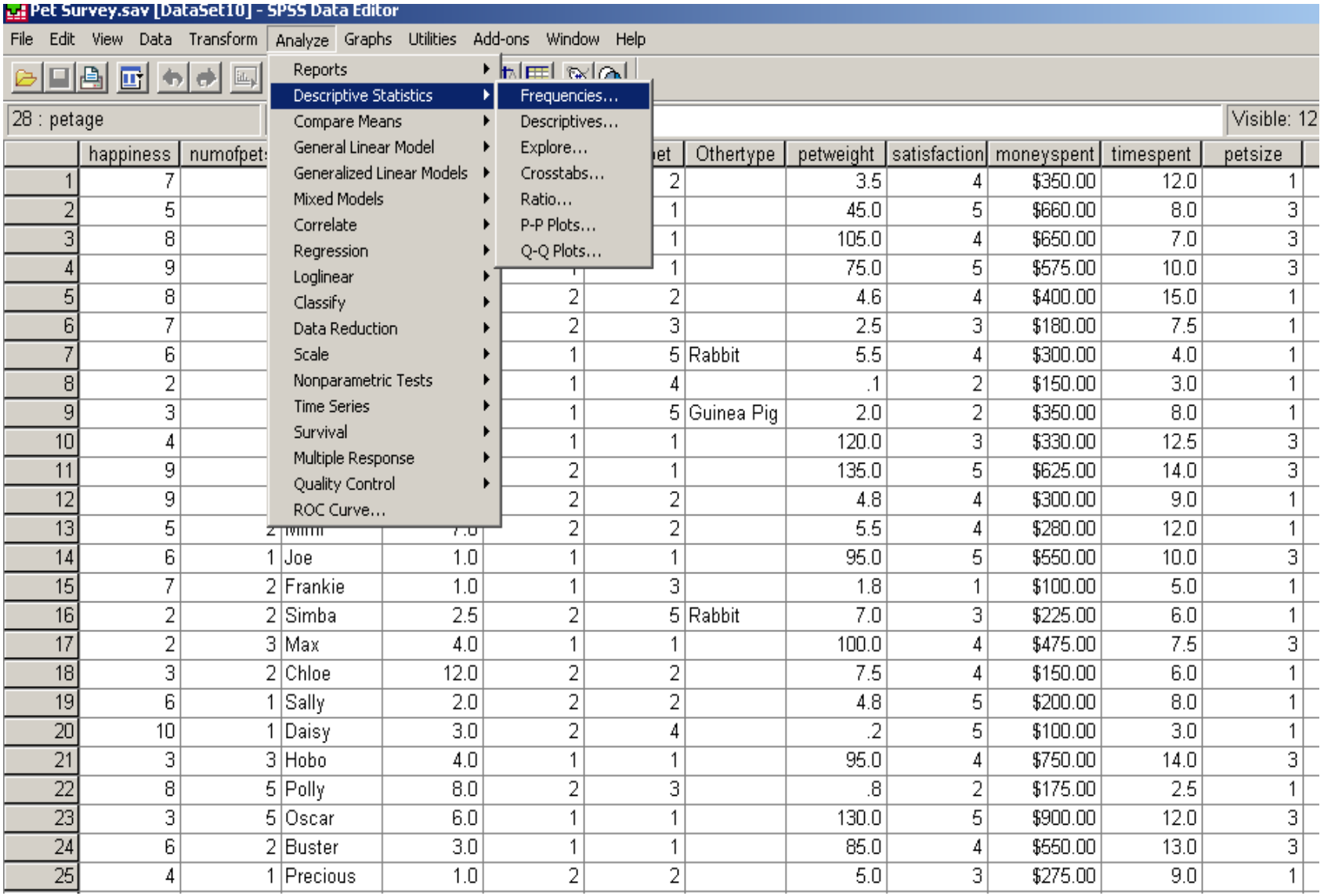
Pet Survey



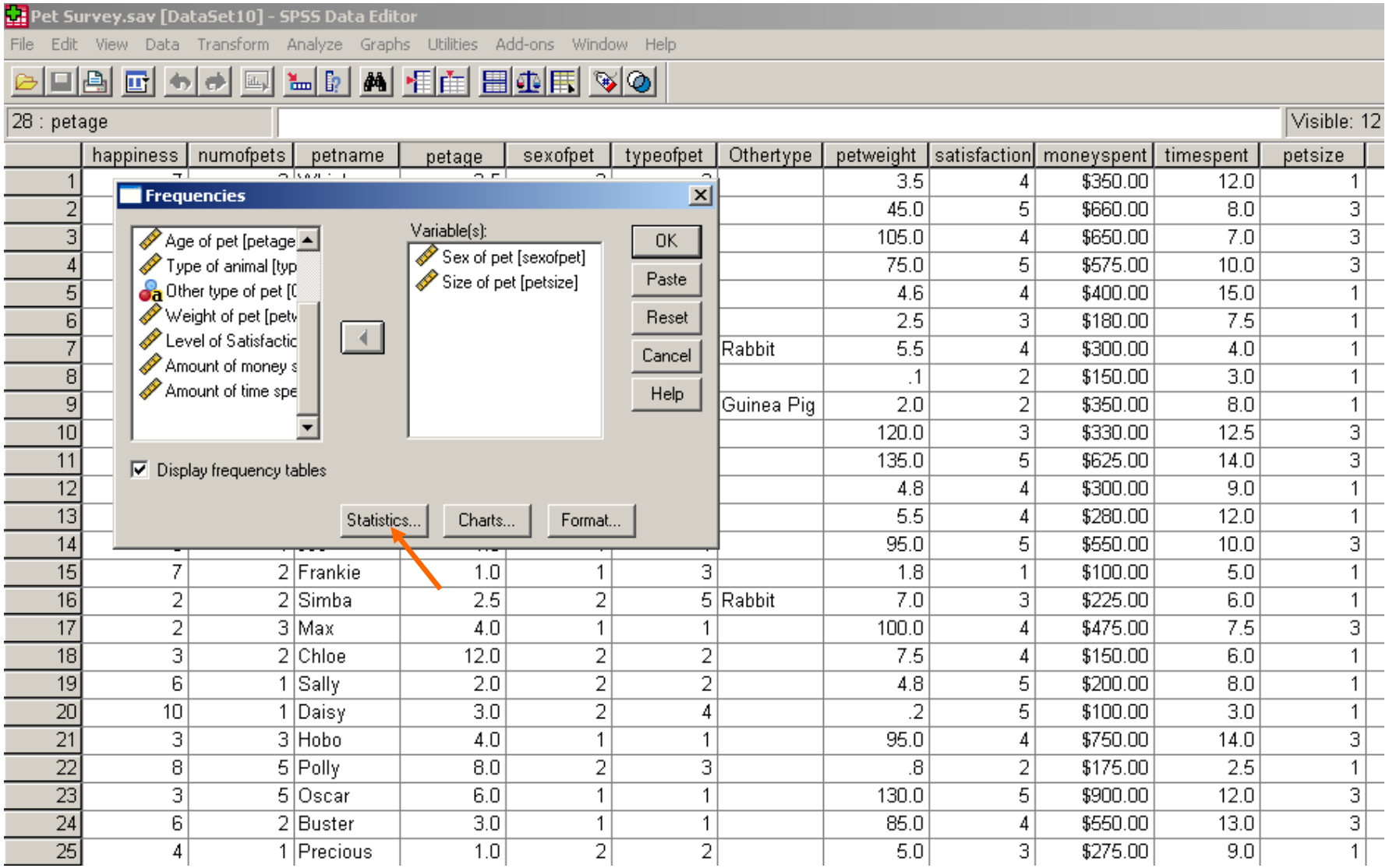
Question #	Name	Variable Type
Q1	**happiness**	➢ *Numerical continuous*
Q2	**numofpets**	➢ *Numerical discrete*
Q3	**petname**	➢ *Alphanumeric/text*
Q4	**petage**	➢ *Numerical continuous*
Q5	**sexofpet**	➢ *Binary*
Q6	**typeofpet**	➢ *Categorical nominal*
Q7	**petweight**	➢ *Numerical continuous*
Q8	**satisfaction**	➢ *Categorical ordinal*
Q9	**moneyspent**	➢ *Numerical continuous*
Q10	**timespent**	➢ *Numerical continuous*
Q11	**petsize**	➢ *Categorical ordinal*

Categorical Variables

- Select **Analyze > Descriptive Statistics > Frequencies**
- A **Frequencies dialog box** will appear
- Move the categorical variables ***(sexofpet, satisfaction*** and ***petsize***), using the arrow into the **Variables** choice box
- Click on **Statistics**



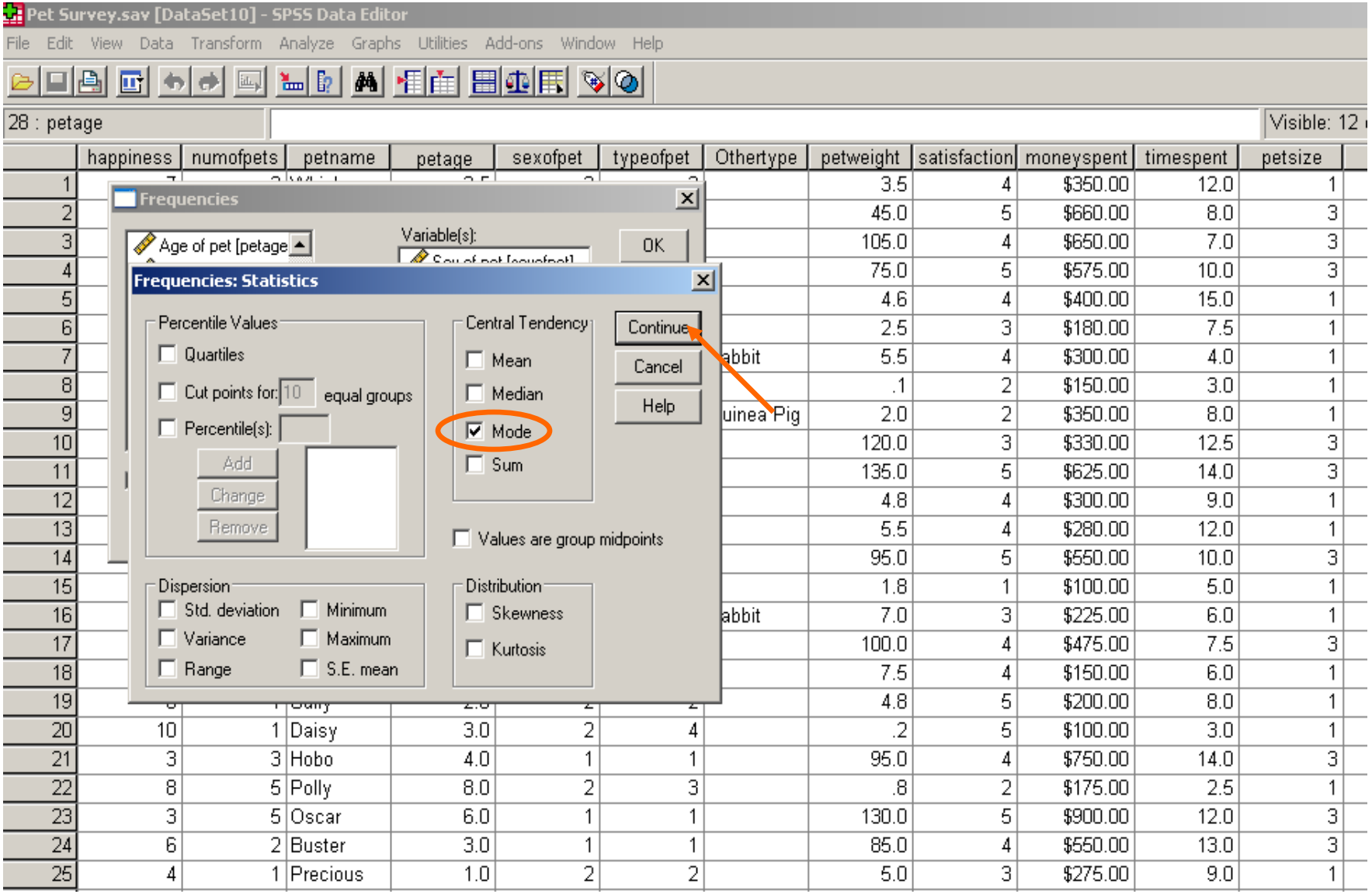
	happiness	numofpets					Othertype	petweight	satisfaction	moneyspent	timespent	petsize
1	7					2		3.5	4	$350.00	12.0	1
2	5					1		45.0	5	$660.00	8.0	3
3	8					1		105.0	4	$650.00	7.0	3
4	9					1		75.0	5	$575.00	10.0	3
5	8				2	2		4.6	4	$400.00	15.0	1
6	7				2	3		2.5	3	$180.00	7.5	1
7	6				1	5	Rabbit	5.5	4	$300.00	4.0	1
8	2				1	4		.1	2	$150.00	3.0	1
9	3				1	5	Guinea Pig	2.0	2	$350.00	8.0	1
10	4				1	1		120.0	3	$330.00	12.5	3
11	9				2	1		135.0	5	$625.00	14.0	3
12	9				2	2		4.8	4	$300.00	9.0	1
13	5	2	Mimi	7.0	2	2		5.5	4	$280.00	12.0	1
14	6	1	Joe	1.0	1	1		95.0	5	$550.00	10.0	3
15	7	2	Frankie	1.0	1	3		1.8	1	$100.00	5.0	1
16	2	2	Simba	2.5	2	5	Rabbit	7.0	3	$225.00	6.0	1
17	2	3	Max	4.0	1	1		100.0	4	$475.00	7.5	3
18	3	2	Chloe	12.0	2	2		7.5	4	$150.00	6.0	1
19	6	1	Sally	2.0	2	2		4.8	5	$200.00	8.0	1
20	10	1	Daisy	3.0	2	4		.2	5	$100.00	3.0	1
21	3	3	Hobo	4.0	1	1		95.0	4	$750.00	14.0	3
22	8	5	Polly	8.0	2	3		.8	2	$175.00	2.5	1
23	3	5	Oscar	6.0	1	1		130.0	5	$900.00	12.0	3
24	6	2	Buster	3.0	1	1		85.0	4	$550.00	13.0	3
25	4	1	Precious	1.0	2	2		5.0	3	$275.00	9.0	1



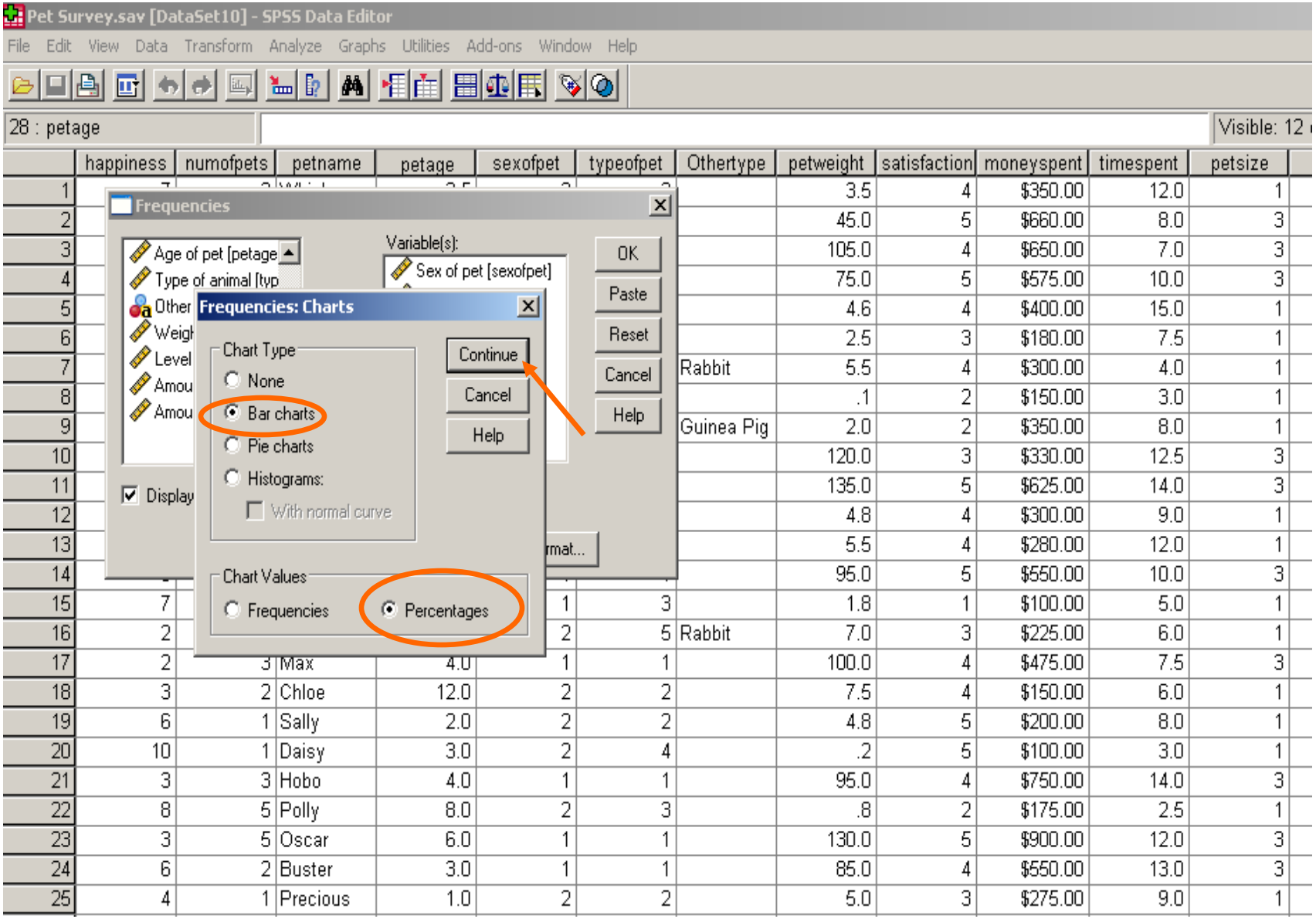
	happiness	numofpets	petname	petage	sexofpet	typeofpet	Othertype	petweight	satisfaction	moneyspent	timespent	petsize
1								3.5	4	$350.00	12.0	1
2								45.0	5	$660.00	8.0	3
3								105.0	4	$650.00	7.0	3
4								75.0	5	$575.00	10.0	3
5								4.6	4	$400.00	15.0	1
6								2.5	3	$180.00	7.5	1
7							Rabbit	5.5	4	$300.00	4.0	1
8								.1	2	$150.00	3.0	1
9							Guinea Pig	2.0	2	$350.00	8.0	1
10								120.0	3	$330.00	12.5	3
11								135.0	5	$625.00	14.0	3
12								4.8	4	$300.00	9.0	1
13								5.5	4	$280.00	12.0	1
14								95.0	5	$550.00	10.0	3
15	7	2	Frankie	1.0	1	3		1.8	1	$100.00	5.0	1
16	2	2	Simba	2.5	2	5	Rabbit	7.0	3	$225.00	6.0	1
17	2	3	Max	4.0	1	1		100.0	4	$475.00	7.5	3
18	3	2	Chloe	12.0	2	2		7.5	4	$150.00	6.0	1
19	6	1	Sally	2.0	2	2		4.8	5	$200.00	8.0	1
20	10	1	Daisy	3.0	2	4		.2	5	$100.00	3.0	1
21	3	3	Hobo	4.0	1	1		95.0	4	$750.00	14.0	3
22	8	5	Polly	8.0	2	3		.8	2	$175.00	2.5	1
23	3	5	Oscar	6.0	1	1		130.0	5	$900.00	12.0	3
24	6	2	Buster	3.0	1	1		85.0	4	$550.00	13.0	3
25	4	1	Precious	1.0	2	2		5.0	3	$275.00	9.0	1

Categorical Variables

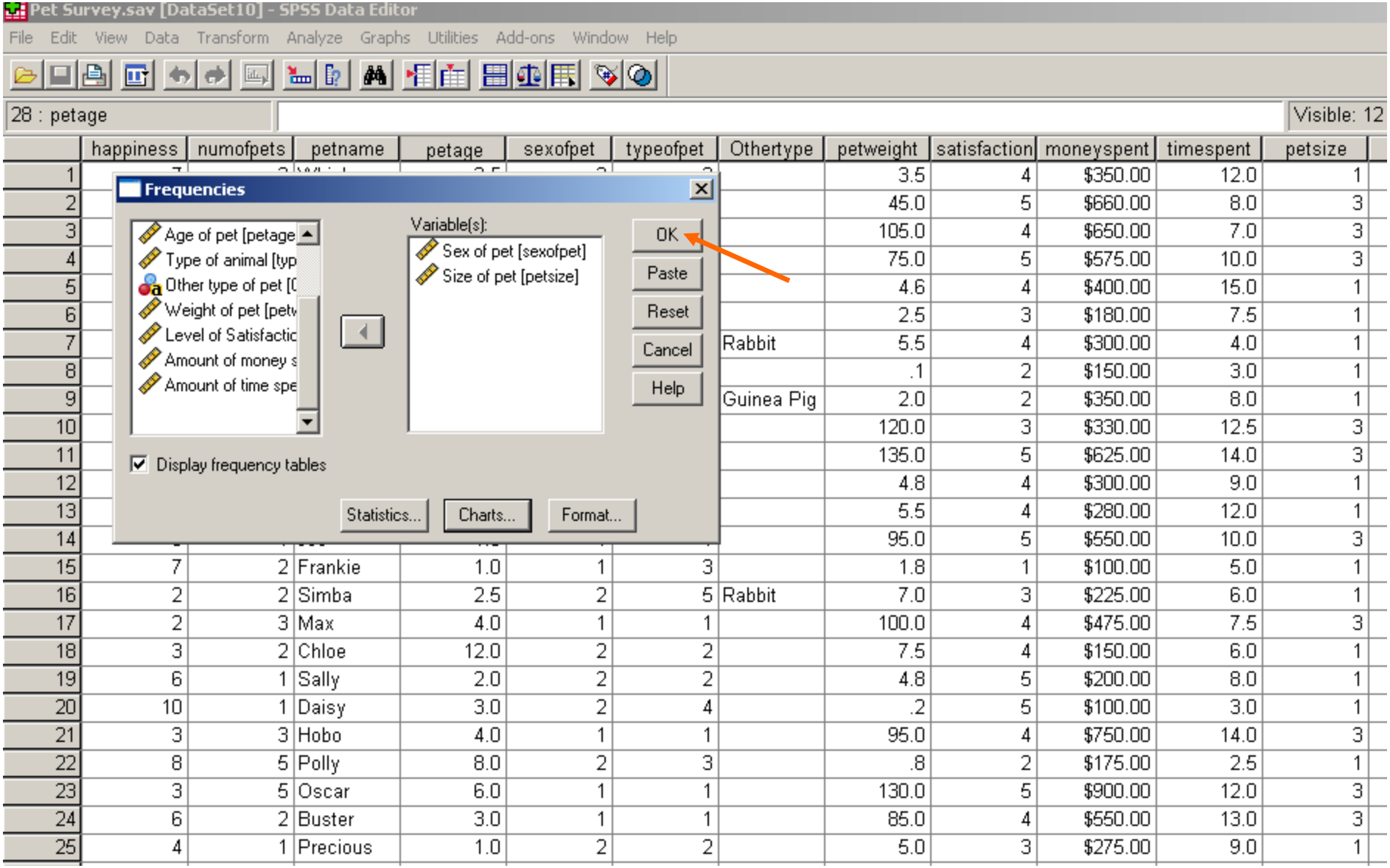
- Under *Central Tendency*, select ***Mode***, then Select **CONTINUE**
- Select ***Charts***. Under *Chart Type*, select ***Bar Charts***. Under *Chart Values*, select ***Percentages***
- Select **CONTINUE**, then **OK**.



	happiness	numofpets	petname	petage	sexofpet	typeofpet	Othertype	petweight	satisfaction	moneyspent	timespent	petsize
1								3.5	4	$350.00	12.0	1
2								45.0	5	$660.00	8.0	3
3								105.0	4	$650.00	7.0	3
4								75.0	5	$575.00	10.0	3
5								4.6	4	$400.00	15.0	1
6								2.5	3	$180.00	7.5	1
7							abbit	5.5	4	$300.00	4.0	1
8								.1	2	$150.00	3.0	1
9							uinea Pig	2.0	2	$350.00	8.0	1
10								120.0	3	$330.00	12.5	3
11								135.0	5	$625.00	14.0	3
12								4.8	4	$300.00	9.0	1
13								5.5	4	$280.00	12.0	1
14								95.0	5	$550.00	10.0	3
15								1.8	1	$100.00	5.0	1
16							abbit	7.0	3	$225.00	6.0	1
17								100.0	4	$475.00	7.5	3
18								7.5	4	$150.00	6.0	1
19								4.8	5	$200.00	8.0	1
20	10	1	Daisy	3.0	2	4		.2	5	$100.00	3.0	1
21	3	3	Hobo	4.0	1	1		95.0	4	$750.00	14.0	3
22	8	5	Polly	8.0	2	3		.8	2	$175.00	2.5	1
23	3	5	Oscar	6.0	1	1		130.0	5	$900.00	12.0	3
24	6	2	Buster	3.0	1	1		85.0	4	$550.00	13.0	3
25	4	1	Precious	1.0	2	2		5.0	3	$275.00	9.0	1



	happiness	numofpets	petname	petage	sexofpet	typeofpet	Othertype	petweight	satisfaction	moneyspent	timespent	petsize
1								3.5	4	$350.00	12.0	1
2								45.0	5	$660.00	8.0	3
3								105.0	4	$650.00	7.0	3
4								75.0	5	$575.00	10.0	3
5								4.6	4	$400.00	15.0	1
6								2.5	3	$180.00	7.5	1
7							Rabbit	5.5	4	$300.00	4.0	1
8								.1	2	$150.00	3.0	1
9							Guinea Pig	2.0	2	$350.00	8.0	1
10								120.0	3	$330.00	12.5	3
11								135.0	5	$625.00	14.0	3
12								4.8	4	$300.00	9.0	1
13								5.5	4	$280.00	12.0	1
14								95.0	5	$550.00	10.0	3
15	7				1	3		1.8	1	$100.00	5.0	1
16	2				2	5	Rabbit	7.0	3	$225.00	6.0	1
17	2	3	Max	4.0	1	1		100.0	4	$475.00	7.5	3
18	3	2	Chloe	12.0	2	2		7.5	4	$150.00	6.0	1
19	6	1	Sally	2.0	2	2		4.8	5	$200.00	8.0	1
20	10	1	Daisy	3.0	2	4		.2	5	$100.00	3.0	1
21	3	3	Hobo	4.0	1	1		95.0	4	$750.00	14.0	3
22	8	5	Polly	8.0	2	3		.8	2	$175.00	2.5	1
23	3	5	Oscar	6.0	1	1		130.0	5	$900.00	12.0	3
24	6	2	Buster	3.0	1	1		85.0	4	$550.00	13.0	3
25	4	1	Precious	1.0	2	2		5.0	3	$275.00	9.0	1

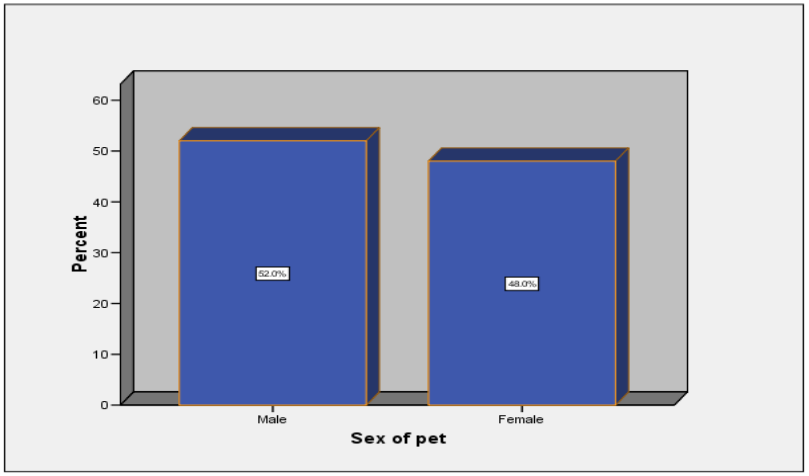


	happiness	numofpets	petname	petage	sexofpet	typeofpet	Othertype	petweight	satisfaction	moneyspent	timespent	petsize
1								3.5	4	$350.00	12.0	1
2								45.0	5	$660.00	8.0	3
3								105.0	4	$650.00	7.0	3
4								75.0	5	$575.00	10.0	3
5								4.6	4	$400.00	15.0	1
6								2.5	3	$180.00	7.5	1
7							Rabbit	5.5	4	$300.00	4.0	1
8								.1	2	$150.00	3.0	1
9							Guinea Pig	2.0	2	$350.00	8.0	1
10								120.0	3	$330.00	12.5	3
11								135.0	5	$625.00	14.0	3
12								4.8	4	$300.00	9.0	1
13								5.5	4	$280.00	12.0	1
14								95.0	5	$550.00	10.0	3
15	7	2	Frankie	1.0	1	3		1.8	1	$100.00	5.0	1
16	2	2	Simba	2.5	2	5	Rabbit	7.0	3	$225.00	6.0	1
17	2	3	Max	4.0	1	1		100.0	4	$475.00	7.5	3
18	3	2	Chloe	12.0	2	2		7.5	4	$150.00	6.0	1
19	6	1	Sally	2.0	2	2		4.8	5	$200.00	8.0	1
20	10	1	Daisy	3.0	2	4		.2	5	$100.00	3.0	1
21	3	3	Hobo	4.0	1	1		95.0	4	$750.00	14.0	3
22	8	5	Polly	8.0	2	3		.8	2	$175.00	2.5	1
23	3	5	Oscar	6.0	1	1		130.0	5	$900.00	12.0	3
24	6	2	Buster	3.0	1	1		85.0	4	$550.00	13.0	3
25	4	1	Precious	1.0	2	2		5.0	3	$275.00	9.0	1

Sample Output

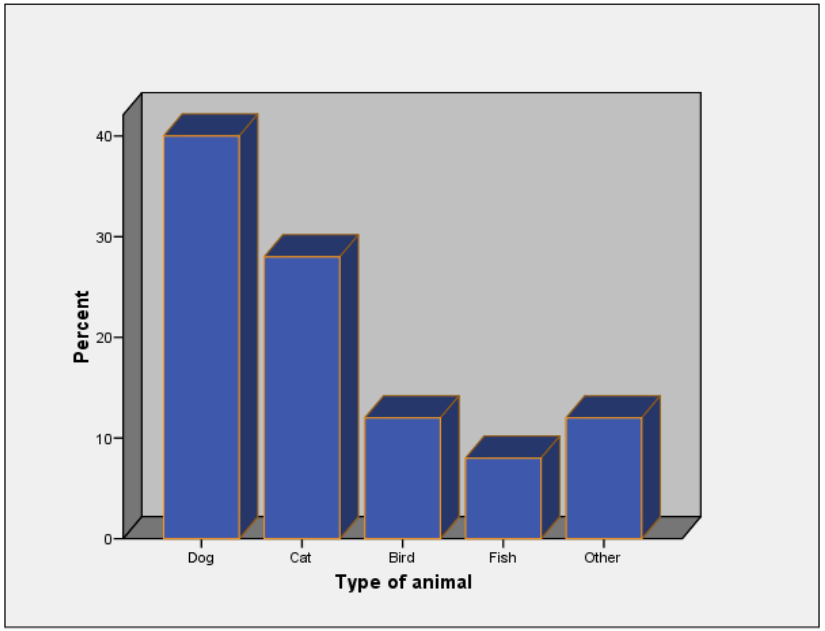
Sex of pet

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	13	52.0	52.0	52.0
	Female	12	48.0	48.0	100.0
	Total	25	100.0	100.0	



Type of animal

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Dog	10	40.0	40.0	40.0
	Cat	7	28.0	28.0	68.0
	Bird	3	12.0	12.0	80.0
	Fish	2	8.0	8.0	88.0
	Other	3	12.0	12.0	100.0
	Total	25	100.0	100.0	

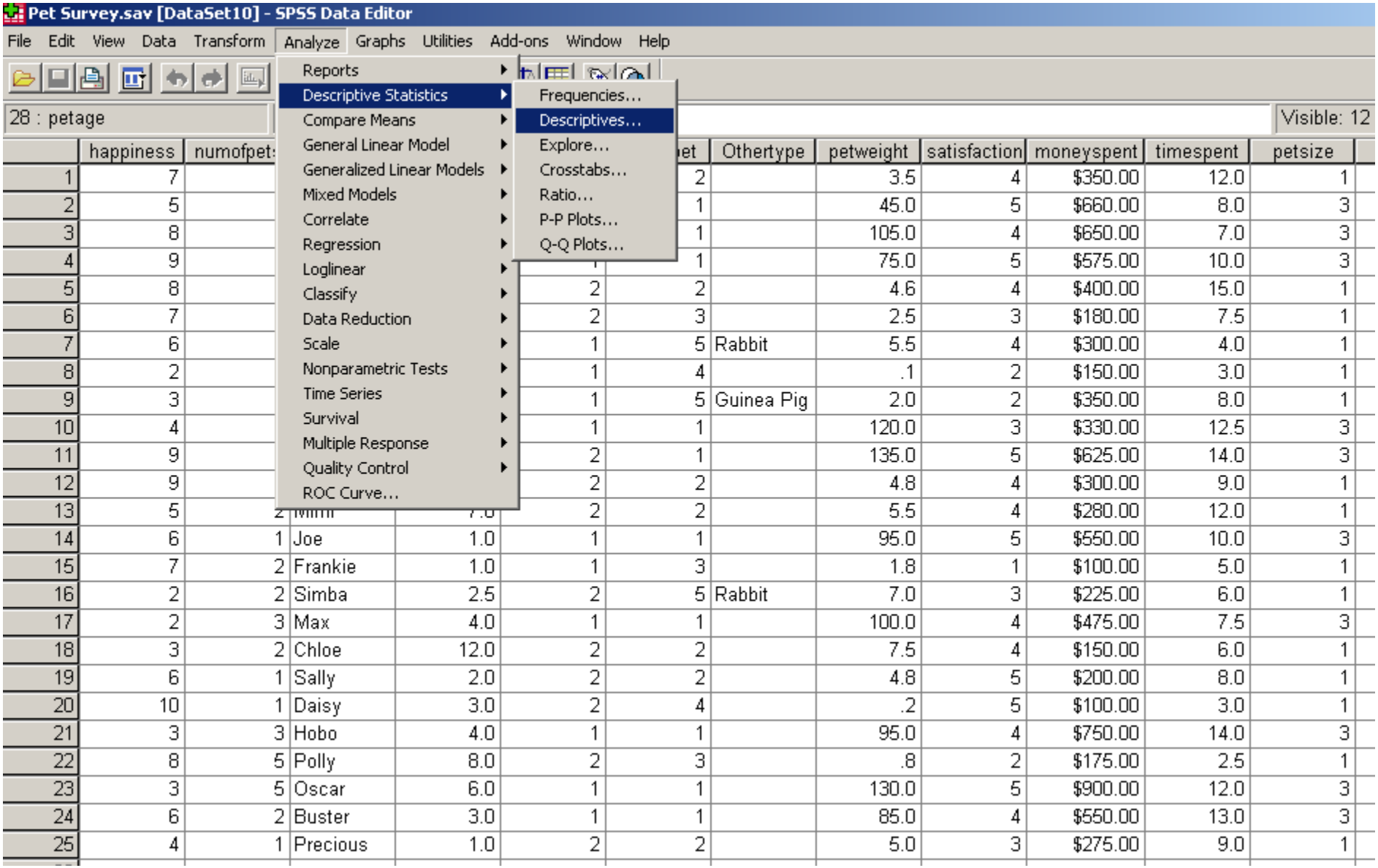


Size of pet

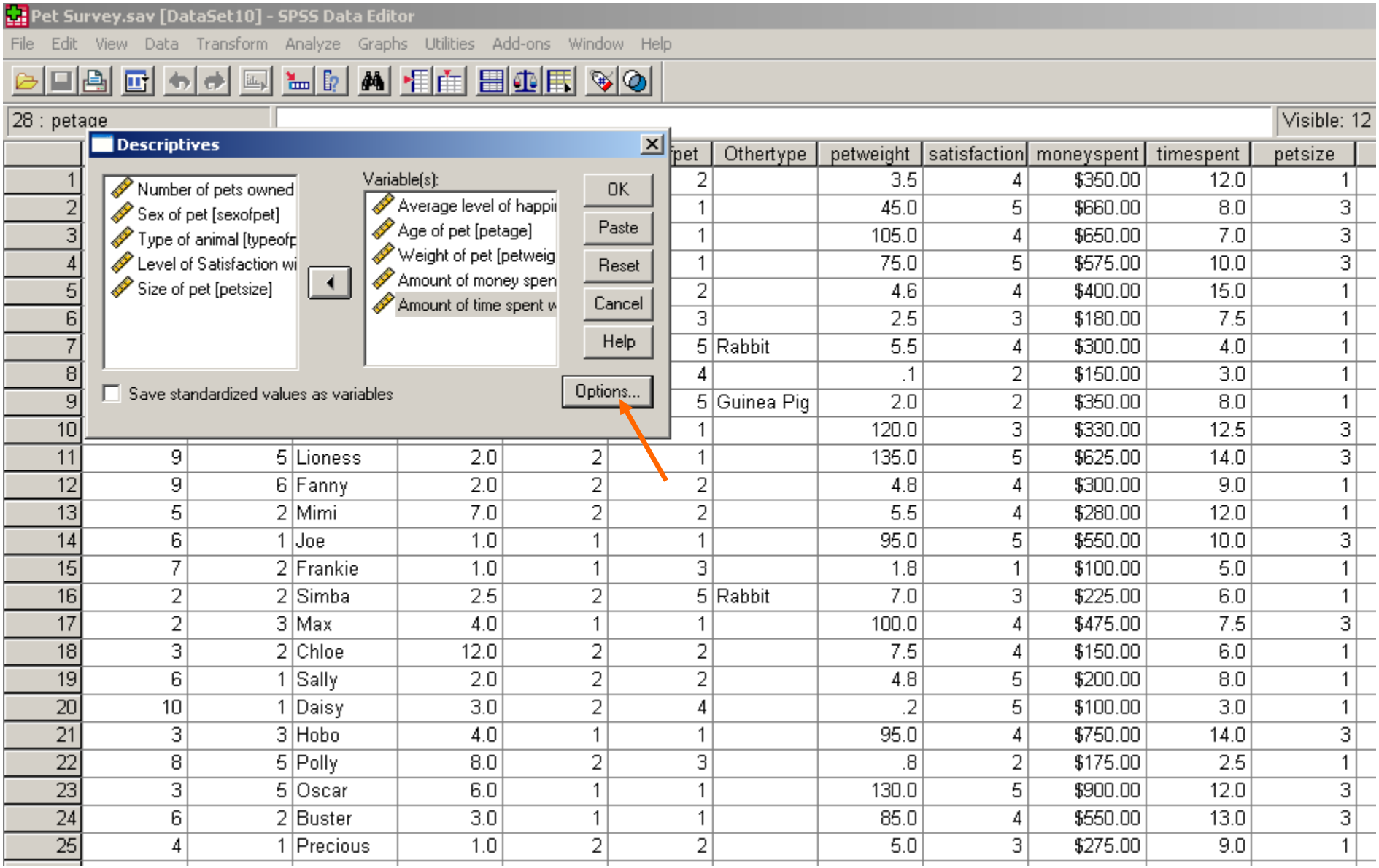
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Small	15	60.0	60.0	60.0
	Large	10	40.0	40.0	100.0
	Total	25	100.0	100.0	

Numerical Variables

- Select **Analyze > Descriptive Statistics > Descriptives**
- A **Descriptives** dialog box will appear
- Move the numerical variables ***(happiness, petage, petweight, moneyspent*** and ***timespent***), using the arrow into the **Variables** choice box
- Click on the ***Options*** button

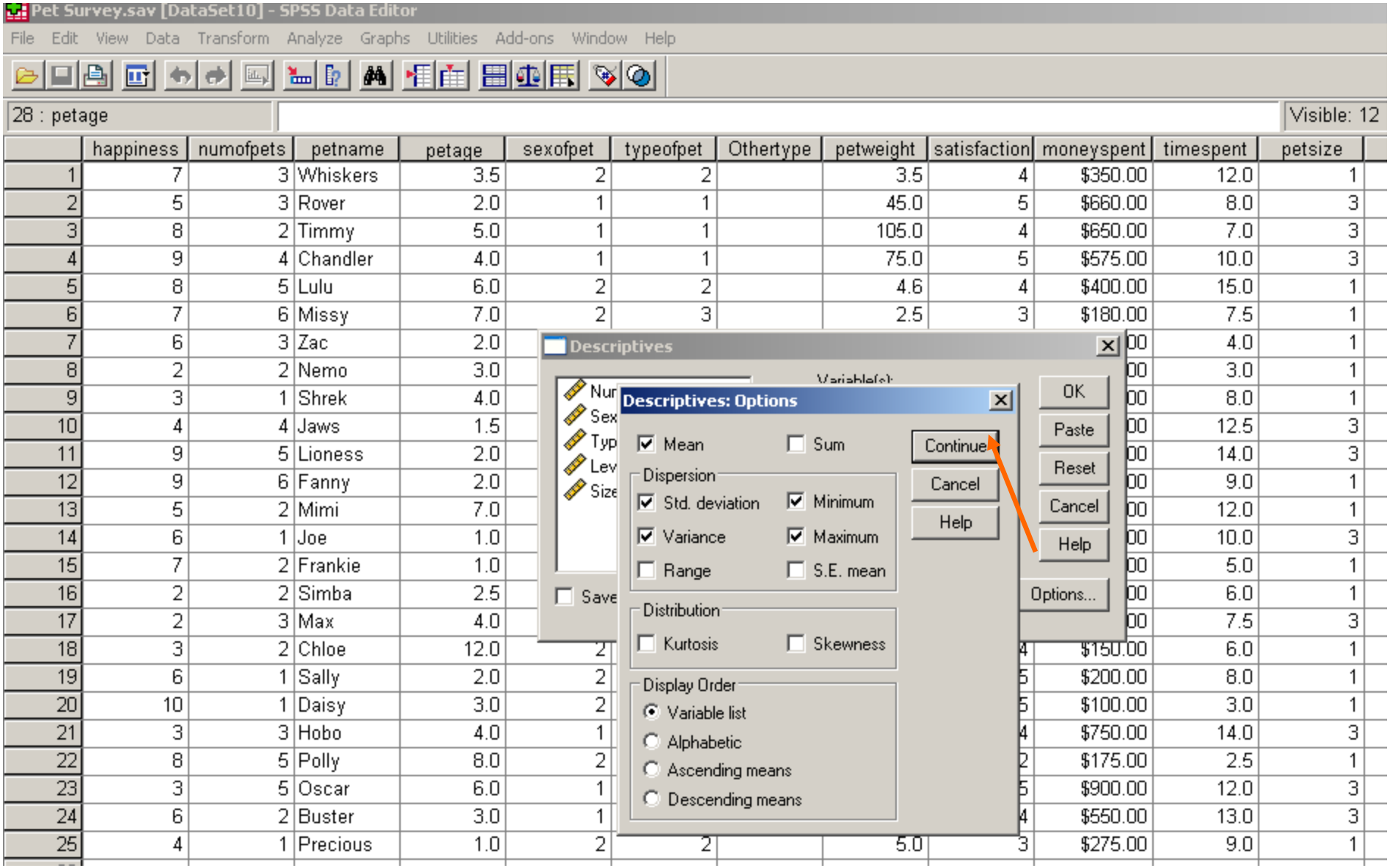


	happiness	numofpets					Othertype	petweight	satisfaction	moneyspent	timespent	petsize
1	7					2		3.5	4	$350.00	12.0	1
2	5					1		45.0	5	$660.00	8.0	3
3	8					1		105.0	4	$650.00	7.0	3
4	9					1		75.0	5	$575.00	10.0	3
5	8			2	2			4.6	4	$400.00	15.0	1
6	7			2	3			2.5	3	$180.00	7.5	1
7	6			1	5		Rabbit	5.5	4	$300.00	4.0	1
8	2			1	4			.1	2	$150.00	3.0	1
9	3			1	5		Guinea Pig	2.0	2	$350.00	8.0	1
10	4			1	1			120.0	3	$330.00	12.5	3
11	9			2	1			135.0	5	$625.00	14.0	3
12	9			2	2			4.8	4	$300.00	9.0	1
13	5	2	Mimi	7.0	2	2		5.5	4	$280.00	12.0	1
14	6	1	Joe	1.0	1	1		95.0	5	$550.00	10.0	3
15	7	2	Frankie	1.0	1	3		1.8	1	$100.00	5.0	1
16	2	2	Simba	2.5	2	5	Rabbit	7.0	3	$225.00	6.0	1
17	2	3	Max	4.0	1	1		100.0	4	$475.00	7.5	3
18	3	2	Chloe	12.0	2	2		7.5	4	$150.00	6.0	1
19	6	1	Sally	2.0	2	2		4.8	5	$200.00	8.0	1
20	10	1	Daisy	3.0	2	4		.2	5	$100.00	3.0	1
21	3	3	Hobo	4.0	1	1		95.0	4	$750.00	14.0	3
22	8	5	Polly	8.0	2	3		.8	2	$175.00	2.5	1
23	3	5	Oscar	6.0	1	1		130.0	5	$900.00	12.0	3
24	6	2	Buster	3.0	1	1		85.0	4	$550.00	13.0	3
25	4	1	Precious	1.0	2	2		5.0	3	$275.00	9.0	1

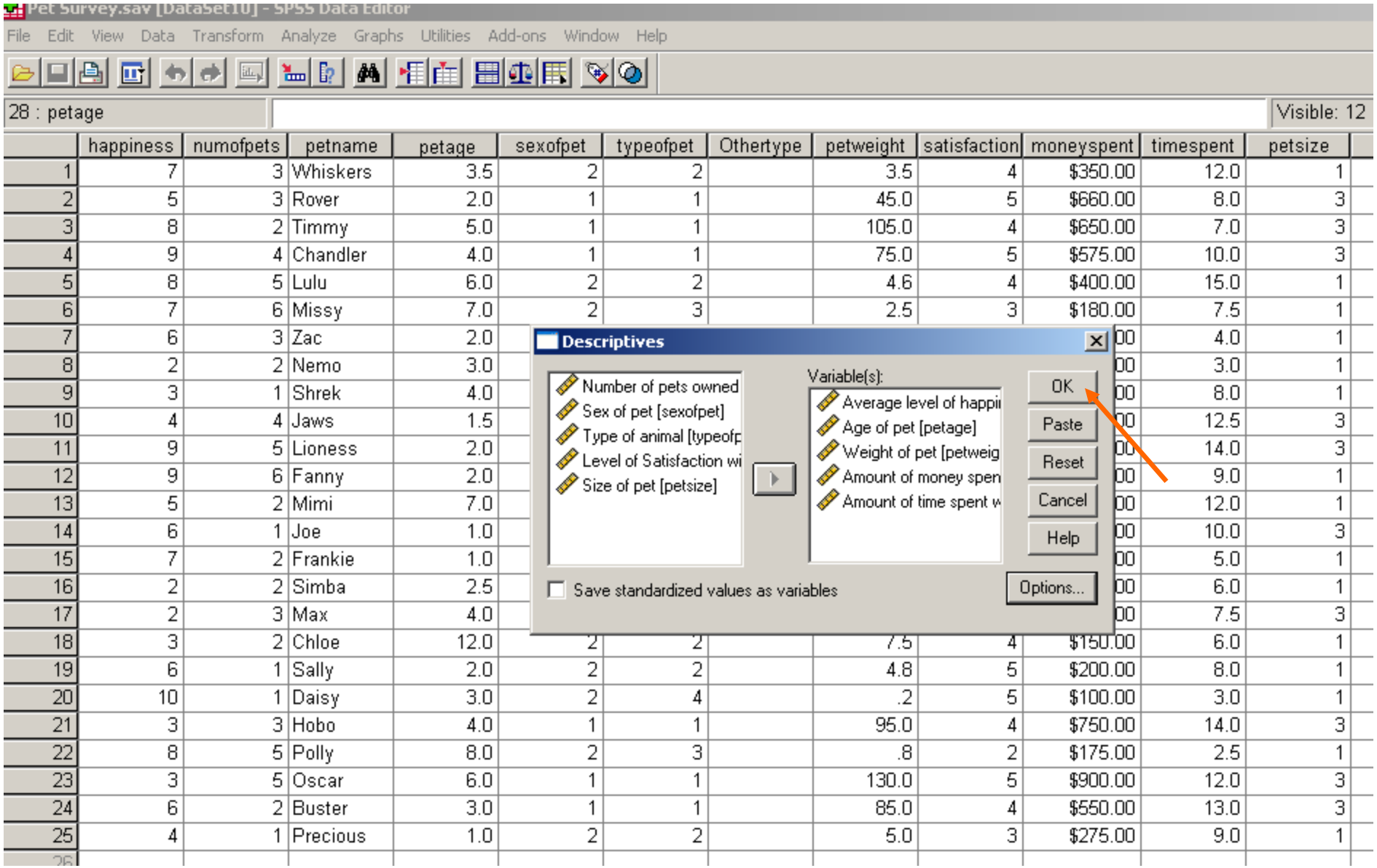

Pet Survey.sav [DataSet10] - SPSS Data Editor
File Edit View Data Transform Analyze Graphs Utilities Add-ons Window Help
28 : petage
Visible: 12
Descriptives
Number of pets owned
Sex of pet [sexofpet]
Type of animal [typeofp
Level of Satisfaction wi
Size of pet [petsize]
Variable(s):
Average level of happi
Age of pet [petage]
Weight of pet [petweig
Amount of money spen
Amount of time spent w
OK
Paste
Reset
Cancel
Help
Options...
Save standardized values as variables
pet Othertype petweight satisfaction moneyspent timespent petsize
2 3.5 4 $350.00 12.0 1
1 45.0 5 $660.00 8.0 3
1 105.0 4 $650.00 7.0 3
1 75.0 5 $575.00 10.0 3
2 4.6 4 $400.00 15.0 1
3 2.5 3 $180.00 7.5 1
5 Rabbit 5.5 4 $300.00 4.0 1
4 .1 2 $150.00 3.0 1
5 Guinea Pig 2.0 2 $350.00 8.0 1
1 120.0 3 $330.00 12.5 3
11 9 5 Lioness 2.0 2 1 135.0 5 $625.00 14.0 3
12 9 6 Fanny 2.0 2 2 4.8 4 $300.00 9.0 1
13 5 2 Mimi 7.0 2 2 5.5 4 $280.00 12.0 1
14 6 1 Joe 1.0 1 1 95.0 5 $550.00 10.0 3
15 7 2 Frankie 1.0 1 3 1.8 1 $100.00 5.0 1
16 2 2 Simba 2.5 2 5 Rabbit 7.0 3 $225.00 6.0 1
17 2 3 Max 4.0 1 1 100.0 4 $475.00 7.5 3
18 3 2 Chloe 12.0 2 2 7.5 4 $150.00 6.0 1
19 6 1 Sally 2.0 2 2 4.8 5 $200.00 8.0 1
20 10 1 Daisy 3.0 2 4 .2 5 $100.00 3.0 1
21 3 3 Hobo 4.0 1 1 95.0 4 $750.00 14.0 3
22 8 5 Polly 8.0 2 3 .8 2 $175.00 2.5 1
23 3 5 Oscar 6.0 1 1 130.0 5 $900.00 12.0 3
24 6 2 Buster 3.0 1 1 85.0 4 $550.00 13.0 3
25 4 1 Precious 1.0 2 2 5.0 3 $275.00 9.0 1

Numerical Variables

- Ensure that the options ***Mean, Std Deviation, Minimum*** and ***Maximum*** are selected
- If you are interested in the ***Skewness*** or ***Kurtosis*** of the distribution you can select those as well
- Select **CONTINUE**, then **OK**.



	happiness	numofpets	petname	petage	sexofpet	typeofpet	Othertype	petweight	satisfaction	moneyspent	timespent	petsize
1	7	3	Whiskers	3.5	2	2		3.5	4	$350.00	12.0	1
2	5	3	Rover	2.0	1	1		45.0	5	$660.00	8.0	3
3	8	2	Timmy	5.0	1	1		105.0	4	$650.00	7.0	3
4	9	4	Chandler	4.0	1	1		75.0	5	$575.00	10.0	3
5	8	5	Lulu	6.0	2	2		4.6	4	$400.00	15.0	1
6	7	6	Missy	7.0	2	3		2.5	3	$180.00	7.5	1
7	6	3	Zac	2.0							4.0	1
8	2	2	Nemo	3.0							3.0	1
9	3	1	Shrek	4.0							8.0	1
10	4	4	Jaws	1.5							12.5	3
11	9	5	Lioness	2.0							14.0	3
12	9	6	Fanny	2.0							9.0	1
13	5	2	Mimi	7.0							12.0	1
14	6	1	Joe	1.0							10.0	3
15	7	2	Frankie	1.0							5.0	1
16	2	2	Simba	2.5							6.0	1
17	2	3	Max	4.0							7.5	3
18	3	2	Chloe	12.0	2				4	$150.00	6.0	1
19	6	1	Sally	2.0	2				5	$200.00	8.0	1
20	10	1	Daisy	3.0	2				5	$100.00	3.0	1
21	3	3	Hobo	4.0	1				4	$750.00	14.0	3
22	8	5	Polly	8.0	2				2	$175.00	2.5	1
23	3	5	Oscar	6.0	1				5	$900.00	12.0	3
24	6	2	Buster	3.0	1				4	$550.00	13.0	3
25	4	1	Precious	1.0	2	2		5.0	3	$275.00	9.0	1



	happiness	numofpets	petname	petage	sexofpet	typeofpet	Othertype	petweight	satisfaction	moneyspent	timespent	petsize
1	7	3	Whiskers	3.5	2	2		3.5	4	$350.00	12.0	1
2	5	3	Rover	2.0	1	1		45.0	5	$660.00	8.0	3
3	8	2	Timmy	5.0	1	1		105.0	4	$650.00	7.0	3
4	9	4	Chandler	4.0	1	1		75.0	5	$575.00	10.0	3
5	8	5	Lulu	6.0	2	2		4.6	4	$400.00	15.0	1
6	7	6	Missy	7.0	2	3		2.5	3	$180.00	7.5	1
7	6	3	Zac	2.0						00	4.0	1
8	2	2	Nemo	3.0						00	3.0	1
9	3	1	Shrek	4.0						00	8.0	1
10	4	4	Jaws	1.5						00	12.5	3
11	9	5	Lioness	2.0						00	14.0	3
12	9	6	Fanny	2.0						00	9.0	1
13	5	2	Mimi	7.0						00	12.0	1
14	6	1	Joe	1.0						00	10.0	3
15	7	2	Frankie	1.0						00	5.0	1
16	2	2	Simba	2.5						00	6.0	1
17	2	3	Max	4.0						00	7.5	3
18	3	2	Chloe	12.0	2	2		7.5	4	$150.00	6.0	1
19	6	1	Sally	2.0	2	2		4.8	5	$200.00	8.0	1
20	10	1	Daisy	3.0	2	4		.2	5	$100.00	3.0	1
21	3	3	Hobo	4.0	1	1		95.0	4	$750.00	14.0	3
22	8	5	Polly	8.0	2	3		.8	2	$175.00	2.5	1
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24	6	2	Buster	3.0	1	1		85.0	4	$550.00	13.0	3
25	4	1	Precious	1.0	2	2		5.0	3	$275.00	9.0	1

Sample Output

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation	Variance
Average level of happiness on a scale of 1 to 10	25	2	10	5.68	2.495	6.227
Age of pet	25	1.0	12.0	3.860	2.6241	6.886
Weight of pet	25	.1	135.0	41.624	50.1853	2518.562
Amount of money spent on pet per year	25	$100.00	$900.00	$384.0000	$220.09941	48443.750
Amount of time spent with pet each week	25	2.5	15.0	8.720	3.6858	13.585
Valid N (listwise)	25					

Summary

- You should now be able to:
  - √ Start up and enter SPSS
  - √ Enter and Save Data in SPSS
  - √ Import data from an Excel spreadsheet into SPSS
  - √ Recode a variable
  - √ Conduct simple descriptive statistics in SPSS

Thank You

Any Questions??

If you have any additional questions or comments, please contact:

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College of Education,University of Florida

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