

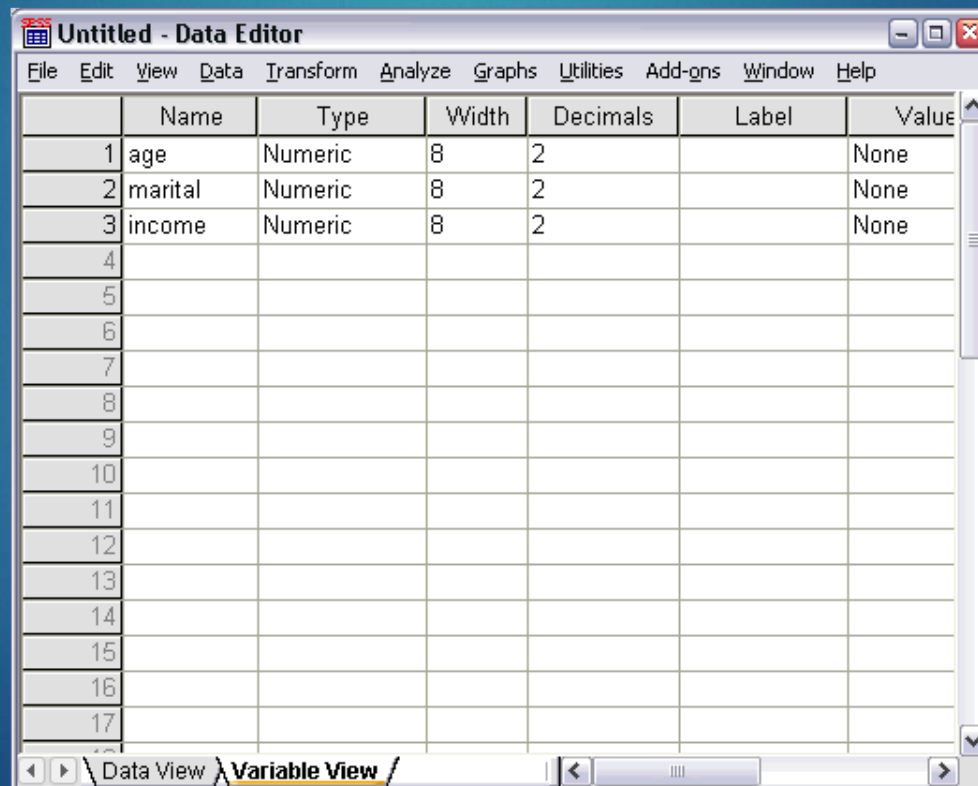
Entering Data in SPSS

Entering Data

- Data can be entered **directly**, or it can be imported from a number of **different sources** (Microsoft Excel, Microsoft Access and text files)

Entering Numeric Data

- You need to define the variables that will be used.
- ❖ age, marital status, and income.



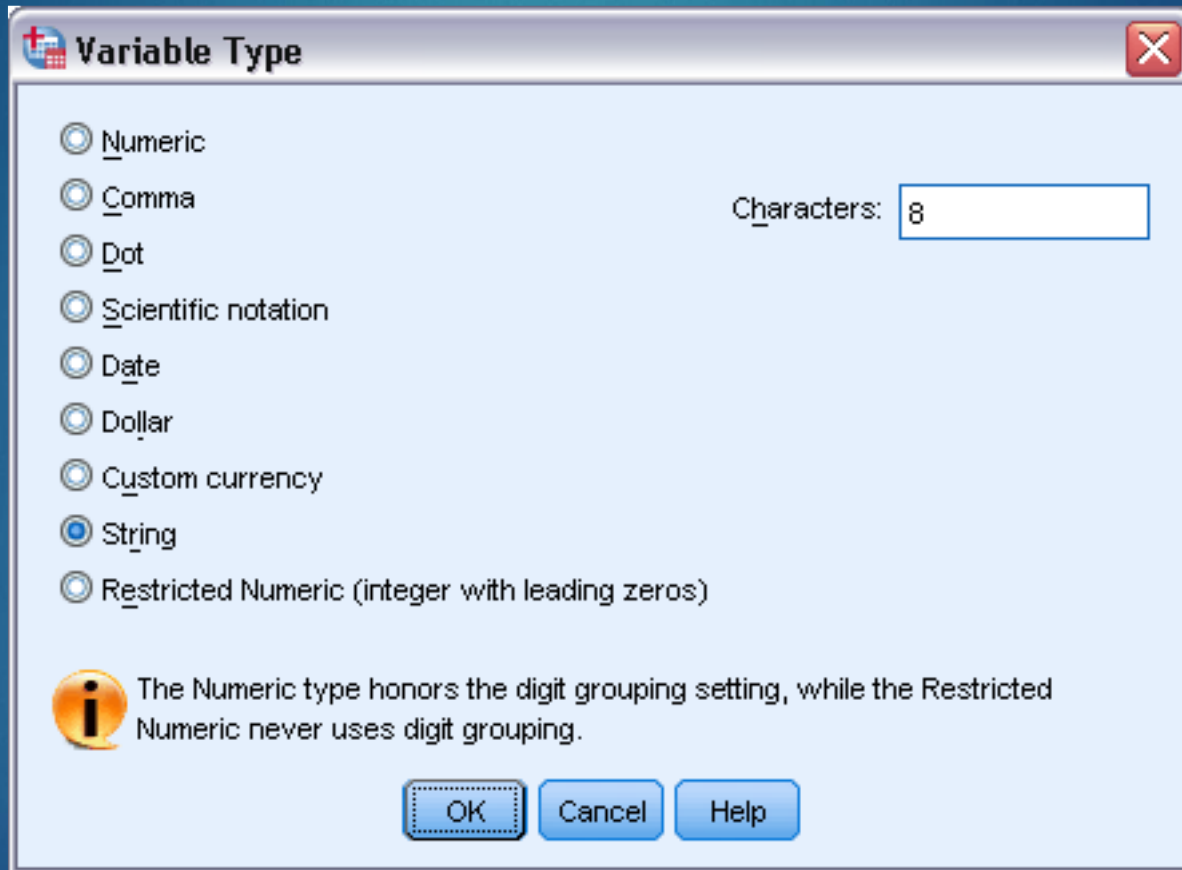
Entering String Data

- Non-numeric data, such as **strings** of text, can also be entered into the Data Editor.
- In the first cell of the first empty row, type **sex** for the variable name.

Entering String Data

- Click the *Type* cell next to your entry.
- Click the button on the right side of the *Type* cell to open the variable type dialog box.
- Select String to specify the variable type.

Entering String Data



The image shows a 'Variable Type' dialog box with a list of radio buttons on the left and a 'Characters' input field on the right. The 'String' option is selected. At the bottom, there is an information icon and a text note, and three buttons: OK, Cancel, and Help.

Variable Type

- ☐ Numeric
- ☐ Comma
- ☐ Dot
- ☐ Scientific notation
- ☐ Date
- ☐ Dollar
- ☐ Custom currency
- ☒ String
- ☐ Restricted Numeric (integer with leading zeros)

Characters:

 The Numeric type honors the digit grouping setting, while the Restricted Numeric never uses digit grouping.

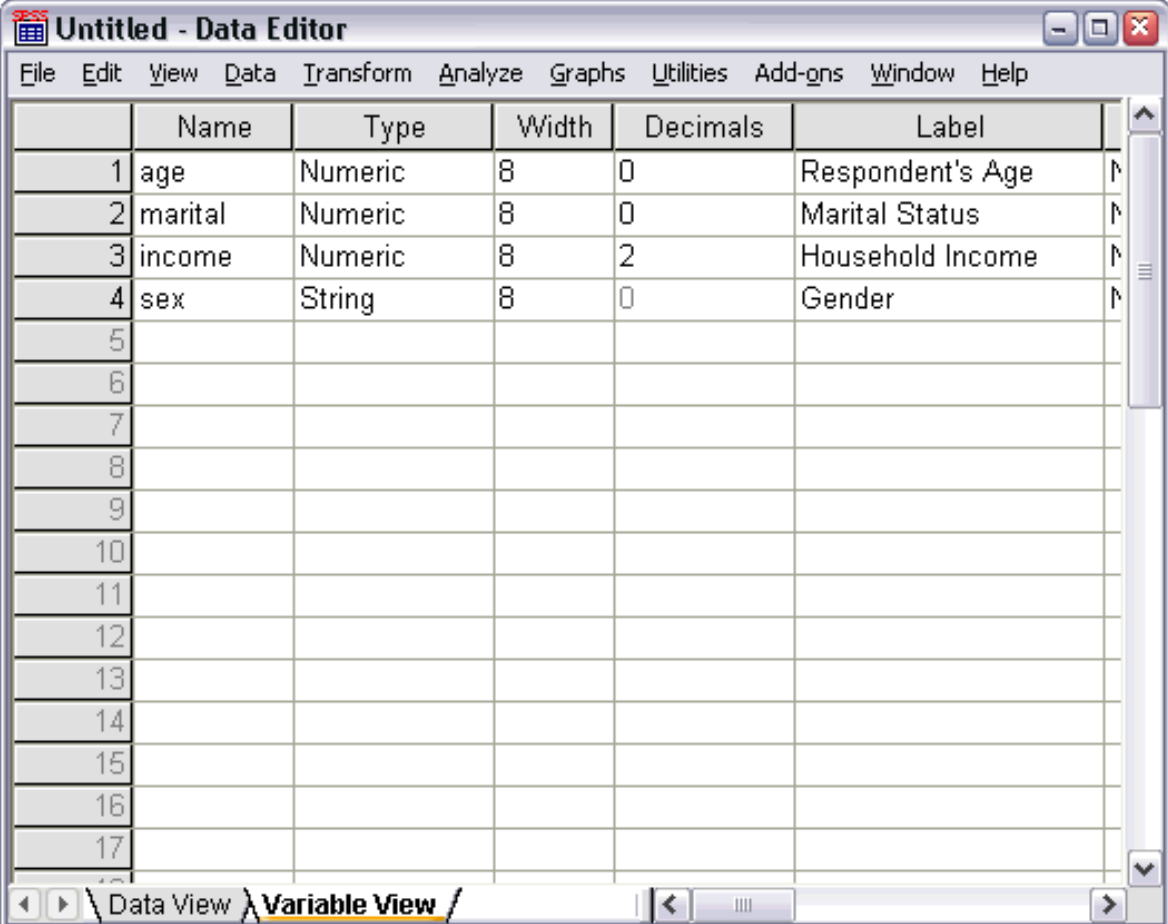
Defining Data

- In addition to defining **data types**, you can also **define descriptive variable labels** and **value labels** for variable names and data value.

Adding variable labels

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- Labels are meant to provide descriptions of variables.



The image shows the SPSS Data Editor window titled "Untitled - Data Editor". The window is in "Variable View" mode, as indicated by the tabs at the bottom. The table displays the following data:

	Name	Type	Width	Decimals	Label
1	age	Numeric	8	0	Respondent's Age
2	marital	Numeric	8	0	Marital Status
3	income	Numeric	8	2	Household Income
4	sex	String	8	0	Gender
5					
6					
7					
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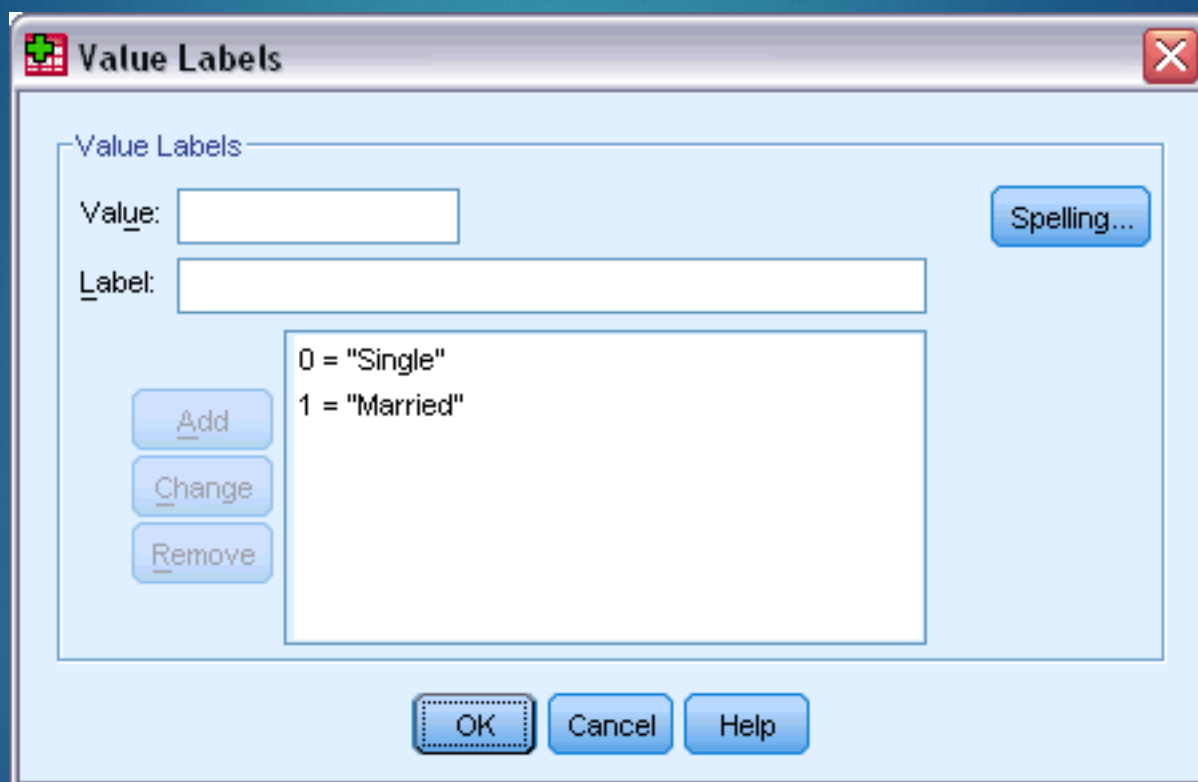
Adding Value Labels for Numeric Variables

- Click the Values cell for the marital row, and then click the button on the right side of the cell to open the Value Labels dialog box.
- ❖ Type 0 in the Value field.
- ❖ Type Single in the Label field.
- ❖ Click Add to add this label to the list.

Adding Value Labels for Numeric Variables

- ❖ Type **1** in the Value field, and type **Married** in the Label field.
- Click Add, and then click OK to save your changes and return to the Data Editor.
- These labels can also **be displayed in Data View**, which can make your data more readable.

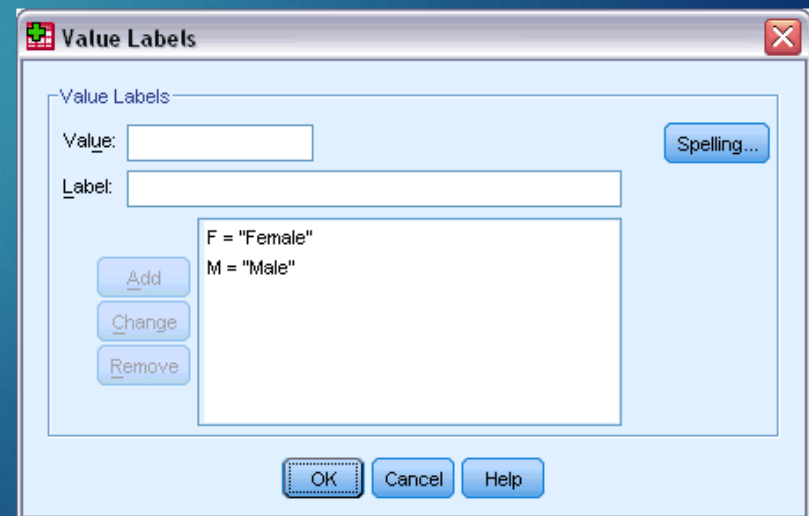
Adding Value Labels for Numeric Variables



Adding Value Labels for String Variables

- String variables may require value labels as well.

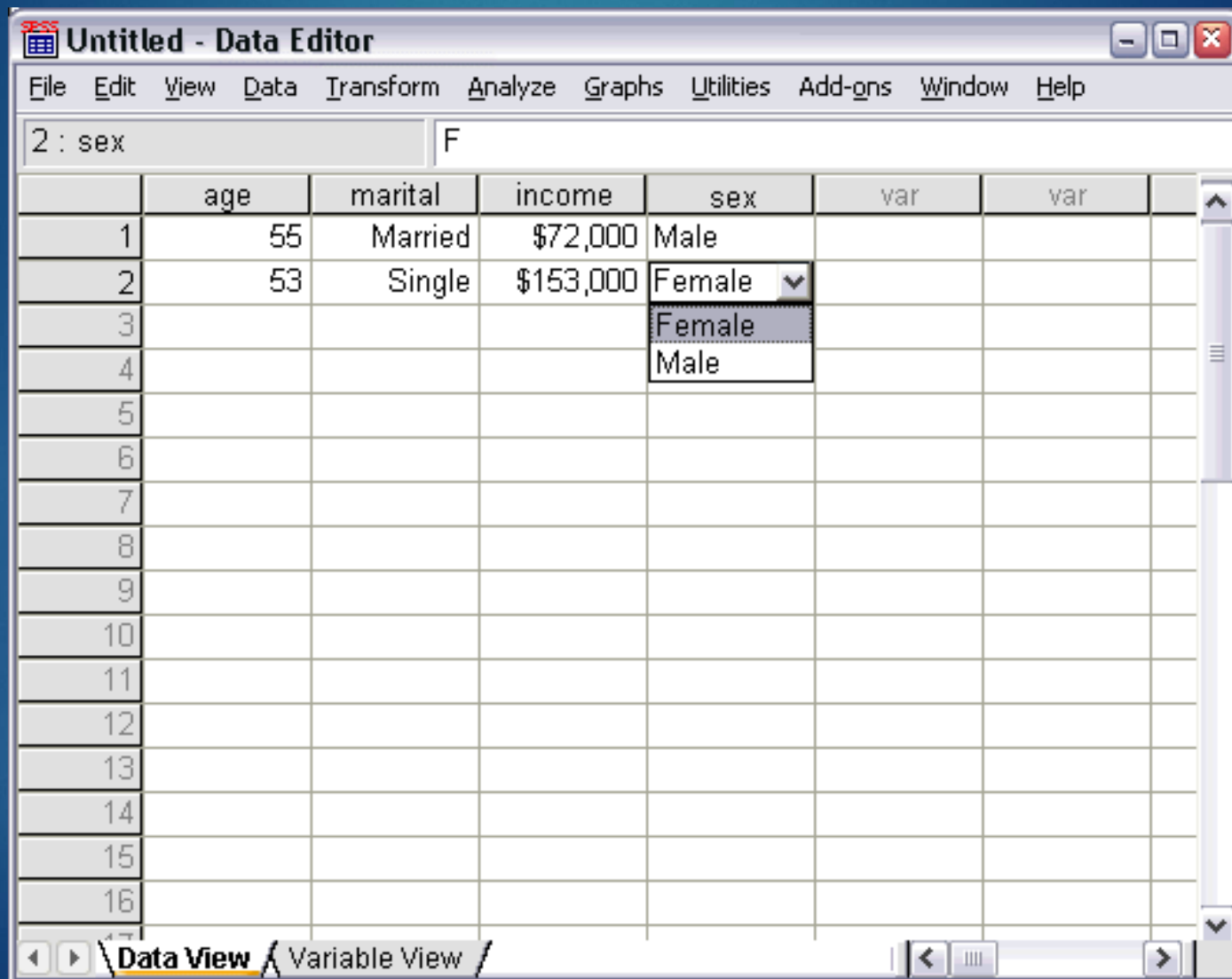
For example, your data may use single letters, **M** or **F**, to identify the **sex** of the subject.



Using Value Labels for Data Entry

- Click the **Data View tab** at the bottom of the Data Editor window.
- In the first row, **select** the cell for **sex**.
- Click the button on the right side of the cell, and then choose Male from the **drop-down list**.

Using Value Labels for Data Entry



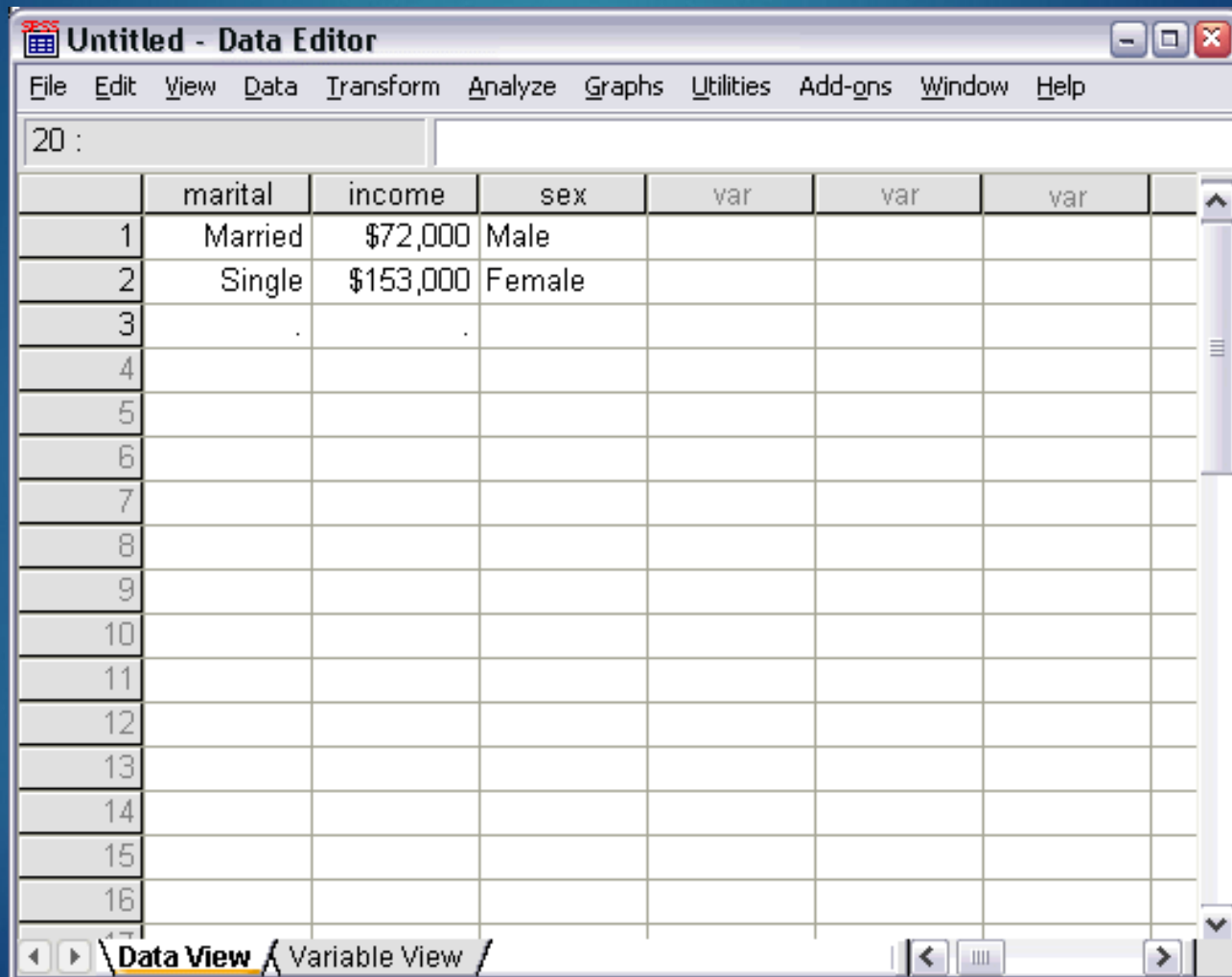
Handling Missing Data

- **Missing** or **invalid** data are generally too common to ignore.
- Survey respondents may **refuse** to answer certain questions, may **not know the answer**, or may answer in an **unexpected format**.
- If you don't **filter** or **identify** these data, your analysis may not provide accurate results.

Handling Missing Data

- For **numeric data**, empty data fields or fields containing invalid entries are converted to **system-missing**, which is identifiable by a **single period**.

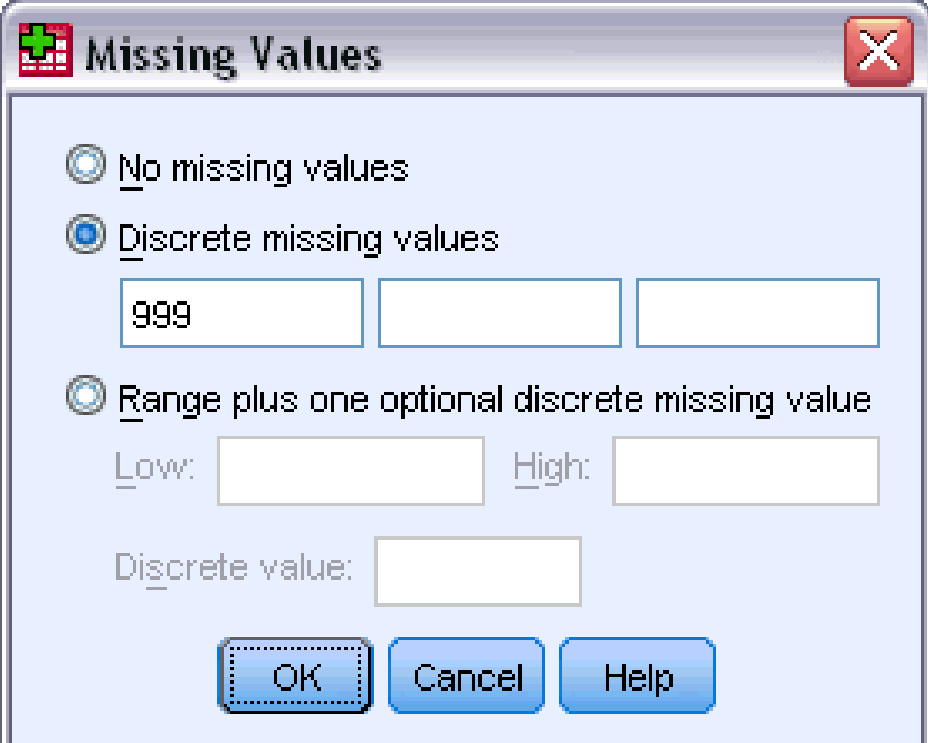
Handling Missing Data



Missing Values for a Numeric Variable

- Click the *Variable View* tab.
- Click the Missing cell and then click the button on the right side of the cell to open the Missing Values dialog box.
- In this dialog box, you can specify up to **three distinct missing values**, or you can specify a **range of values** plus **one additional discrete value**.

Missing Values for a Numeric Variable



The image shows a 'Missing Values' dialog box with a title bar containing a green plus icon and a red close button. The dialog has three radio button options. The first option, 'No missing values', is unselected. The second option, 'Discrete missing values', is selected, and below it are three text input fields; the first contains '999'. The third option, 'Range plus one optional discrete missing value', is unselected. Below it are 'Low:' and 'High:' labels with corresponding text input fields. At the bottom, there is a 'Discrete value:' label with a text input field. At the very bottom are three buttons: 'OK', 'Cancel', and 'Help'.

Missing Values

☐ No missing values

☒ Discrete missing values

999

☐ Range plus one optional discrete missing value

Low: High:

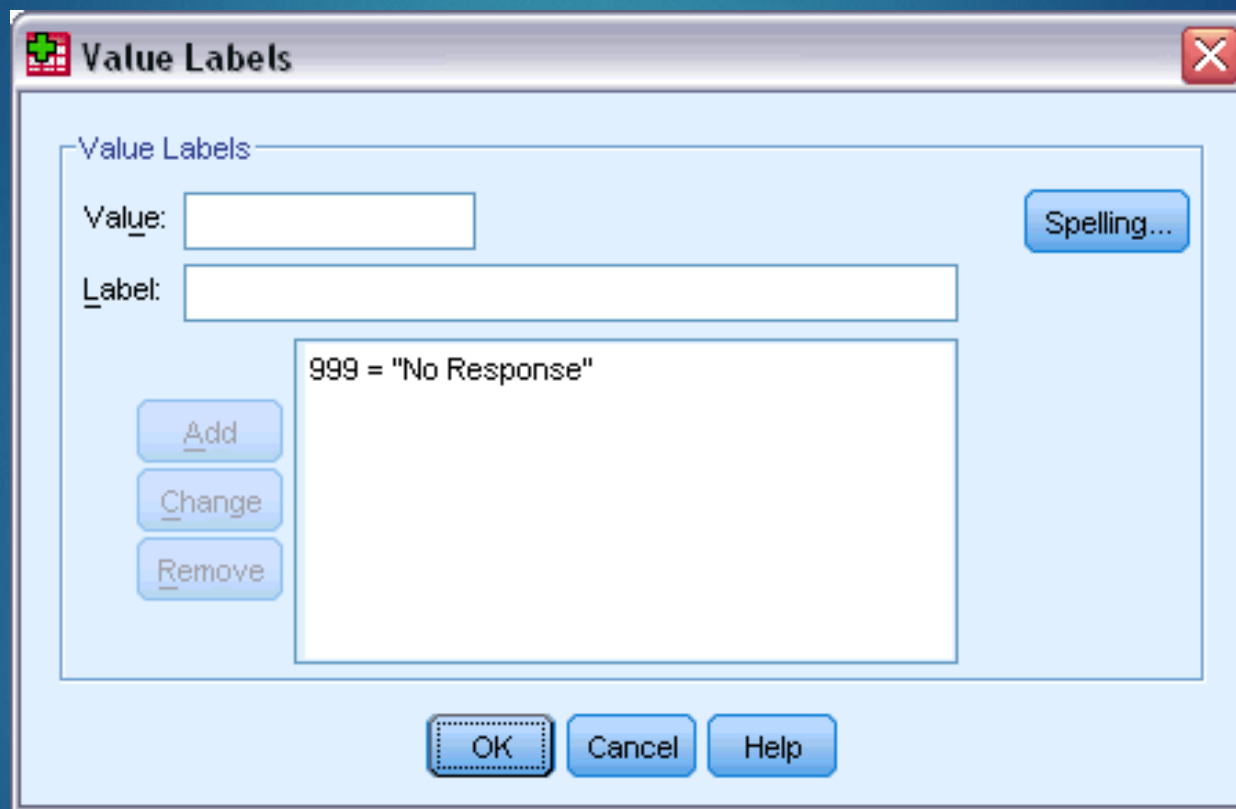
Discrete value:

OK Cancel Help

Missing Values for a Numeric Variable

- Now that the missing data value has been added, a label can be applied to that value.
- Click the Values cell in the age row, and then click the button on the right side of the cell to open the Value Labels dialog box.
- Type **999** in the **Value** field.
- Type **No Response** in the **Label** field.

Missing Values for a Numeric Variable



Missing Values for a String Variable

- Missing values for string variables are handled **similarly** to the missing values for numeric variables.
- However, unlike numeric variables, **empty fields** in string variables are **not designated** as **system-missing**.
- Rather, they are interpreted as an empty string.

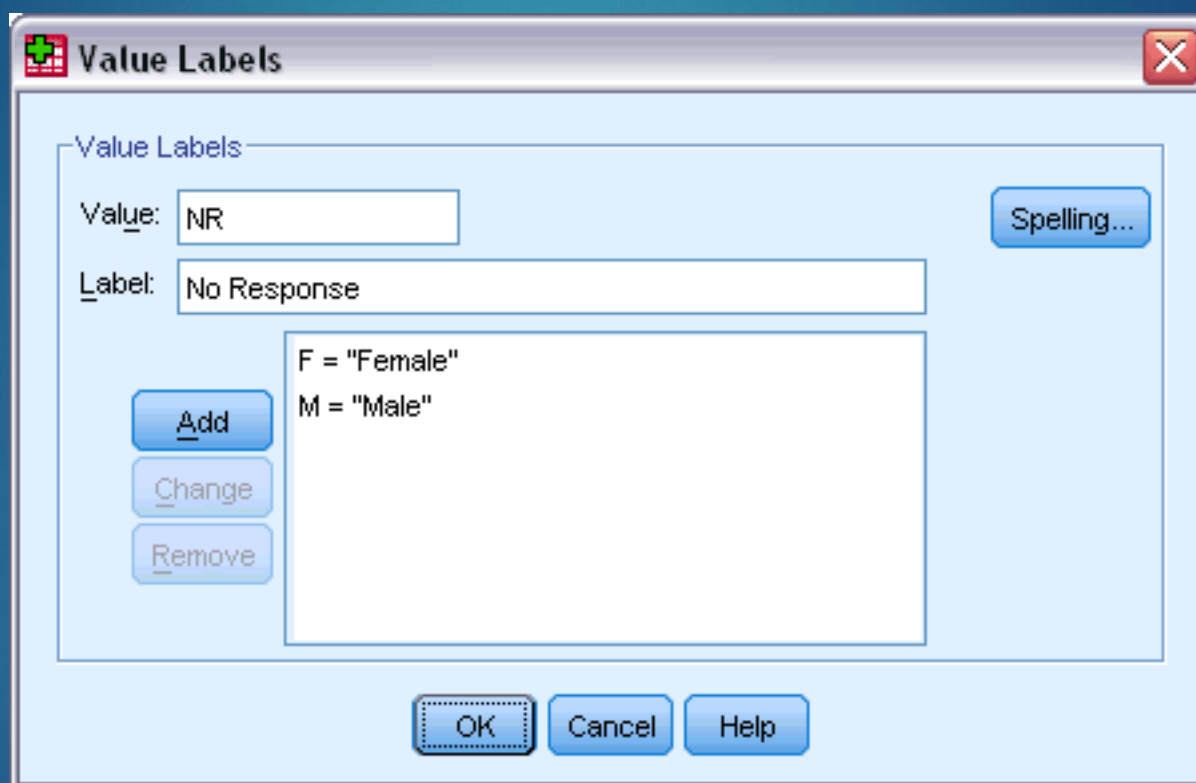
Missing Values for a String Variable

- Click the *Variable View* tab.
- Click the Missing cell and then click the button on the right side of the cell to open the Missing Values dialog box.
- Select **Discrete missing** values.
- Type **NR** in the first text box.
- Missing values for string variables are **case sensitive**. So, a value of nr is not treated as a missing value.

Missing Values for a String Variable

- Now you can add a label for the missing value.
- Click the Values cell in the age row, and then click the button on the right side of the cell to open the Value Labels dialog box.
- Type **NR** in the **Value** field.
- Type **No Response** in the **Label** field.

Missing Values for a String Variable



Opening a Data File

- To open a data file:
 - ❖ From the menus choose:
 - ✓ File > Open > Data...
 - ❖ Alternatively, you can use the Open File button on the toolbar.



Opening a Data File

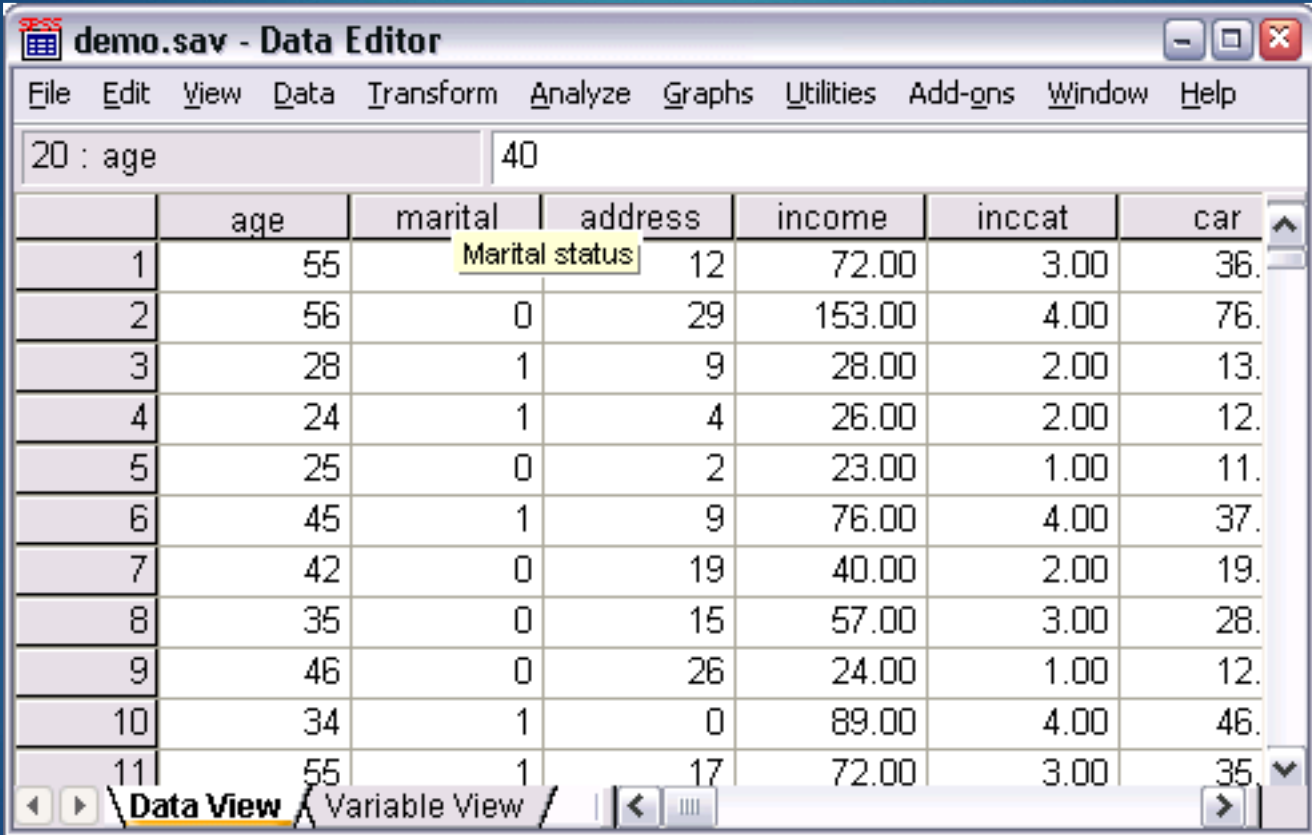
- By default, IBM® SPSS® Statistics data files (.sav extension) are displayed.

Opening a Data File

- The data file is displayed in the Data Editor.

In the Data Editor, if you put the mouse cursor on a variable name (the column headings), a more descriptive variable label is displayed (if a label has been defined for that variable).

Opening a Data File



The screenshot shows the SPSS Data Editor window for a file named 'demo.sav'. The window has a menu bar with options: File, Edit, View, Data, Transform, Analyze, Graphs, Utilities, Add-ons, Window, and Help. Below the menu bar is a toolbar with icons for opening, saving, and other functions. The main area displays a data table with 11 rows and 7 columns. The columns are labeled: age, marital, address, income, inccat, and car. The first row is highlighted, and the cell in the 'marital' column contains the text 'Marital status'. The bottom of the window shows the 'Data View' tab selected, with a 'Variable View' tab also visible.

	age	marital	address	income	inccat	car
1	55	Marital status	12	72.00	3.00	36.
2	56	0	29	153.00	4.00	76.
3	28	1	9	28.00	2.00	13.
4	24	1	4	26.00	2.00	12.
5	25	0	2	23.00	1.00	11.
6	45	1	9	76.00	4.00	37.
7	42	0	19	40.00	2.00	19.
8	35	0	15	57.00	3.00	28.
9	46	0	26	24.00	1.00	12.
10	34	1	0	89.00	4.00	46.
11	55	1	17	72.00	3.00	35.

- From the menus choose:
 - ❖ View > Value Labels
 - ❖ Alternatively, you can use the Value Labels button on the toolbar.

