MICROCOMPUTER APPLICATION #1

CREATING, SAVING, & PRINTING AN SPSS (for Windows) DATA FILE

In this assignment you will use the "Data Editor" in SPSS for Windows to create a data file (that will be used in subsequent assignments to analyze data) and submit to me a printed copy of the final product. The Data Editor is a spreadsheet-like system for defining, entering, editing, and displaying data. In the data matrix you will create, the rows comprise the units of analysis, observations, or cases (e.g., teachers), the columns contain the variables (e.g., sex, age, marital status, . . . salary) and the cells (where rows and columns intersect) contain the "value" or "score" each case has on a given variable. Before creating a data file it is helpful to provide a context for understanding the purpose of this aspect of the research process.

Most statistical analysis begins with raw data, often in the form of individual answers to questions on a research instrument (e.g., questionnaire, survey, schedule). These answers are typically *coded* by the researcher, who then lists the coded responses or creates a data file. For example, in many surveys the sex of the respondent is identified. In the original questionnaire this information may be listed as

"Sex (check one)   Male _____   Female _____ ."

An "X" or some other mark in the appropriate blank identifies the sex of a given respondent. There are, in general, four responses that may appear with respect to this item of information: (1) an "X" next to male, (2) an "X" next to female, (3) no "X" anywhere, so that the item is left blank, and (4) an "X" in both blanks. Although the latter two responses presumably represent mistakes on the part of the respondent or the interviewer, they nevertheless do occur at times, and must be taken into account.

The original information is *coded* in some systematic way. For example, we might let a "1" stand for a female response and a "2" for a male response. The coding should also indicate what to do about mistakes. Our instructions here might be something like this: If there is no answer or the answer is ambiguous check the rest of the schedule to see if sex can be positively identified through other answers. If it cannot, then code "9" should be used, which means that there was no answer, that the relevant information was not available, or that the information given is ambiguous.

When observations are recorded in coded form it is necessary to have both a listing of the observations and a code book to interpret that listing. We illustrate these steps by presenting some data obtained in a sampling of public school teachers taken in a mid-western community school district. For illustrative purposes here, we give a random sample of 50 of the teachers and seven kinds of information on each teacher. There are seven variables -- 1) sex, 2) age, 3) marital status, 4) religious preference, 5) attitudinal response, 6) type of school and 7) annual salary -- that represent data at different levels of measurement. Note that variables 1) through 6) are closed ended whereas 7) is open ended. We shall present the code book first and then the table of raw data which you will use to create an SPSS data file.

CODE BOOK

COLUMN/FIELD	VARIABLE	IDENTIFICATION OF CATEGORIES
1-2		Sequence number of teacher. The "01"

means the first teacher in the sample, "02" the second teacher, and so on to the 50th teacher, coded "50."

3	Sex	1 = Female
		2 = Male
		9 = Information not available

4	Age	1 = 20-27 years old
		2 = 28-35 years old
		3 = 36-43 years old
		4 = 44-51 years old
		5 = 52-59 years old
		6 = 60-67 years old
		9 = information not available

5	Marital status	1 = not married
		2 = married, living with spouse
		3 = separated
		4 = divorced
		5 = widowed
		9 = information not available

6	Religious Preference	1 = Presbyterian
		2 = Methodist
		3 = Lutheran
		4 = Any other specific Protestant denomination
		5 = Protestant, not otherwise specified
		6 = Catholic
		7 − Other
		8 = No preference
		9 = No response to question

7	Response to statement: "The ideas and suggestions of the average teacher in this school district don't really carry much weight."	1 = disagree with statement
		2 = uncertain about statement
		3 = agree with statement
		9 = no response to statement

| 8 | Type of school | 1 = elementary |
| | | 2 = junior high school |
| | | 3 = senior high school |

| 9-10 | Annual salary (in $000's) | [open ended] |

INTRODUCTION TO WINDOWS AND SPSS

SPSS for Windows, a quantitative data analysis program, is an application not unlike some word processors or spreadsheets that you may have already used. Later we'll learn several commands that you will use to analyze data, but for now we'll just touch on the basics.

TO OPEN SPSS:

1. Click on the SPSS icon.
   Your screen should look like this...
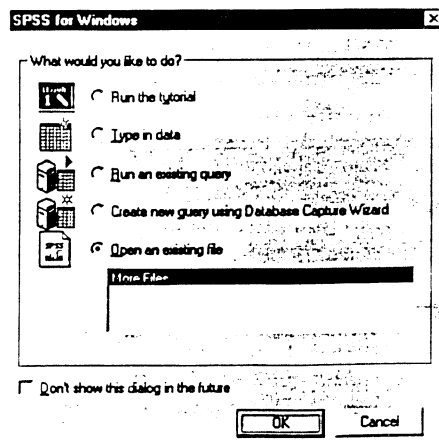
2.

At this point there are 5 choices offered. For now, only 2 will be applicable to your assignments:

1. TYPE IN DATA: to open a new file in which you will CREATE a new data set

2. OPEN AN EXISTING DATA SOURCE: to open a data set that has been previously entered.

For this assignment you will be entering a new data set into the processor, so click 'TYPE IN DATA'.

3.

At the bottom of the screen you will see two 'tabs', one labeled 'Variable View' the other 'Data View'. Click on the tab marked 'Variable View'.

4.
   At this point you are in the correct part of SPSS to type in your codebook. Follow the Key that is given.
   a. Under 'Name', you will type the title of your variable (e.g. – Sex, Age, Marital Status, ect.)
   b. Click the mouse in the cell marked values.
   c. Click the shaded box within the cell. This should bring out the window where you will give the variables their numeric values.
   d. In the value box, you will type the numeric value
   e. In the Value Label box, you will type the 'actual' meaning of the numeric code (e.g.- Male, Female)
   f. Click 'Add' to add the label, and continue until the coding for the variable is complete.

5.

   After the codebook is complete, click on the 'Data View' box on the bottom. You should see, on top, all of your variables listed

6.

   (This is the easy part, albeit a little time consuming)
   Type in your data, as it is shown in the Key.
   The end result should, in its completed state, be a look-alike of the example given.

7.

   FINALLY!!!!
   To save and print your file:
   a. Click 'File'.
   b. Scroll to 'Save As..'
   c. Give the file your initials as a name (e.g.,"wml")
   d. Select the drive that your disk is in
   d. Save
   e. Click Print (you will have to do this two separate times more than likely, once in each 'view', so that both the code book and the data print)
(Word to the wise: MAKE SURE THE DATA IS SAVED ON YOUR DISK BEFORE YOU CLOSE OUT OF SPSS!!!)

   YOU ARE DONE!!!!!!!

RAW DATA TO BE ENTERED FOR CREATING YOUR SPSS DATA FILE

	id	sex	age	marital	religion	attitude	school	salary
1	01	1	2.00	4.00	5.00	1.00	1.00	25.00
2	02	2	4.00	9.00	4.00	2.00	3.00	38.00
3	03	2	6.00	9.00	5.00	3.00	3.00	51.00
4	04	1	6.00	1.00	3.00	1.00	2.00	52.00
5	05	2	3.00	9.00	2.00	3.00	3.00	32.00
6	06	1	5.00	2.00	2.00	1.00	1.00	44.00
7	06	2	5.00	9.00	1.00	1.00	3.00	46.00
8	08	1	4.00	2.00	2.00	3.00	2.00	41.00
9	09	1	1.00	1.00	8.00	2.00	1.00	21.00
10	10	1	2.00	2.00	2.00	2.00	1.00	25.00
11	11	2	2.00	9.00	2.00	2.00	2.00	26.00
12	12	1	2.00	2.00	2.00	1.00	1.00	28.00
13	13	2	4.00	9.00	3.00	3.00	2.00	39.00
14	14	2	2.00	9.00	5.00	3.00	2.00	30.00
15	15	1	2.00	2.00	7.00	1.00	1.00	28.00
16	16	1	1.00	1.00	1.00	1.00	1.00	20.00
17	17	2	1.00	9.00	7.00	1.00	1.00	19.00
18	18	2	4.00	9.00	3.00	3.00	2.00	40.00
19	19	1	1.00	2.00	3.00	2.00	1.00	22.00
20	20	1	1.00	1.00	1.00	2.00	1.00	23.00
21	21	1	5.00	2.00	2.00	2.00	1.00	47.00
22	22	1	2.00	2.00	3.00	1.00	3.00	29.00
23	23	2	5.00	9.00	2.00	2.00	3.00	46.00
24	24	2	2.00	9.00	5.00	2.00	3.00	27.00
25	25	1	5.00	1.00	3.00	1.00	2.00	50.00
26	26	1	1.00	1.00	3.00	3.00	2.00	22.00
27	27	2	1.00	9.00	3.00	2.00	3.00	21.00
28	28	1	1.00	1.00	7.00	2.00	1.00	20.00
29	29	2	1.00	9.00	7.00	3.00	2.00	19.00
30	30	1	3.00	2.00	5.00	3.00	1.00	35.00
31	31	1	4.00	2.00	3.00	1.00	3.00	39.00
32	32	1	1.00	1.00	7.00	2.00	2.00	24.00
33	33	1	2.00	3.00	7.00	1.00	1.00	30.00
34	34	2	4.00	9.00	5.00	3.00	2.00	38.00
35	35	1	2.00	2.00	4.00	3.00	2.00	27.00
36	36	1	6.00	1.00	1.00	2.00	1.00	55.00
37	37	1	5.00	1.00	2.00	2.00	2.00	50.00
38	38	2	3.00	9.00	5.00	2.00	2.00	36.00
39	39	1	1.00	2.00	4.00	3.00	2.00	24.00

	id	sex	age	marital	religion	attitude	school	salary
40	40	2	4.00	9.00	5.00	3.00	2.00	43.00
41	41	1	2.00	2.00	2.00	2.00	1.00	26.00
42	42	1	1.00	2.00	5.00	2.00	1.00	22.00
43	43	2	2.00	9.00	3.00	1.00	3.00	27.00
44	44	2	2.00	9.00	5.00	2.00	3.00	27.00
45	45	1	6.00	1.00	5.00	1.00	2.00	53.00
46	46	1	4.00	2.00	8.00	2.00	2.00	38.00
47	47	1	4.00	5.00	2.00	1.00	2.00	39.00
48	48	2	5.00	9.00	1.00	3.00	2.00	49.00
49	49	1	2.00	1.00	2.00	2.00	2.00	30.00
50	50	2	2.00	9.00	2.00	2.00	3.00	29.00

SAVING AND PRINTING YOUR DATA FILE

To save your file the first time you will click "File", then "Save Data" and name it.
Give your file the name of "***" where the "***" are your first, middle, and last initials, respectively. Be sure to indicate the drive your disk is in. Then, click "ok".

To print an existing file (one you've saved to your disk), make sure your disk with the data file is in the appropriate drive. Then click on "File"; click on "Open"; click on "Data". Under File Name, type "***" (this is the name you gave your file). Finally, click "Print" and then "ok". [2|02]