**TROUBLE SHOOTING TIPS WHEN CREATING DATASETS IN SAS**

If a client has a file to create data in SAS from a source such as ICPSR, here are some steps to get that file to run and to create a data file.

1. Look for the term “libname” in the code. In SAS, libname is a shorthand way of specifying where the data file will be stored. In the example below, whenever “LIB” appears, it stands for the folder Delpit Analyses in the Data in SPSS folder on the Desktop. You will often need to change what comes after the libname statement—the part in single quotes—to make sure that the file the client is trying to create appears in the desired folder.

libname LIB 'C:\Documents and Settings\Tara\Desktop\Data\Delpit Analyses\';

2. Look for the data statement. The data statement will start with the word “data” followed only by the name of the dataset and ending with a semi-colon. (Note that additional code can appear on the same line after the semi-colon. What is important for identifying the data statement is that nothing but the word “data” and the name of the dataset appear before the first semi-colon.) Here are some examples:

**data** tarasdata;

**data** lib.ssdsdatafile;

Notice that in the first example above, the name of the dataset (the string following “data” in the data statement) does not contain a period whereas in the second example it does. Whenever the name of a dataset has only one part (i.e., does not have a period), SAS creates a temporary dataset that is erased when the user exists the program. When the dataset name has two parts (i.e., has a period), SAS creates a permanent data file and saves it to the location that the first part—the part just before the period—stands for. To illustrate, the code below tells SAS to create a permanent data file titled “statconsults” in the folder “Consulting” on the desktop.

/\*Sets the libname SSDS as the Consulting folder on the Desktop\*/

libname SSDS 'C:\Documents and Settings\Desktop\Consulting\';

/\*Specifies that the dataset statconsults should be saved to the libname SSDS (in this case, the Consulting folder on the Desktop)\*/

**data** SSDS.statconsults;

Check that the part before the period in the data statement matches the shorthand name you assigned to the folder or location on the computer where you want the permanent dataset to be saved.

3. Make sure that “run;” appears in the SAS code after the portion of the code that you wish to execute. (It should appear without the quotation marks.) This command in SAS tells the program to execute all the prior code. It never hurts to have the “run;” command more than once, so a quick fix is to simply type it at the very end of the SAS code. Or, if you see the word “quit;” at the very end of the SAS code, you should type “run;” just before it so that the program runs before quitting.

Below is an example of the type of code clients may be using to create permanent data files in SAS. As you can see, often such code is very long. Much of the challenge is in finding the bits of code that could be causing problems in the creation of the permanent data file. Here, the libname statement, data statement, and final run statement are highlighted. (Note that to save space some of the original code has been deleted to create the section of code below. It therefore would not run properly. But it nevertheless gives an idea of how such code might look.)

libname LIB 'C:\Documents and Settings\Tara\Desktop\Data in SPSS\Delpit Analyses\';

filename in1 'D:\child3l.dat';

footnote 'C:\Documents and Settings\Tara\Desktop\Data in SPSS\Delpit Analyses\TEACHING DATA.sas';

**proc** **format**;

value TF

**1** = "TRUE"

**0** = "FALSE"

;

value GENDER

**1** = "MALE"

**2** = "FEMALE"

-**9** = "NOT ASCERTAINED"

;

value RACE

**1** = "WHITE, NON-HISPANIC"

**2** = "BLACK OR AFRICAN AMERICAN, NON-HISPANIC"

**3** = "HISPANIC, RACE SPECIFIED"

**4** = "HISPANIC, RACE NOT SPECIFIED"

**5** = "ASIAN"

**6** = "NATIVE HAWAIIAN, OTHER PACIFIC ISLANDER"

**7** = "AMERICAN INDIAN OR ALASKA NATIVE"

**8** = "MORE THAN ONE RACE, NON HISPANIC"

-**9** = "NOT ASCERTAINED"

;

value A1CLASS

**1** = "AM - MORNING"

**2** = "PM - AFTERNOON"

**3** = "AD - ALL DAY"

;

value YN89F

**1** = "YES"

**2** = "NO"

-**8** = "DON'T KNOW"

-**9** = "NOT ASCERTAINED"

;

**1** = "DO NOT PARTICIPATE IN PHYSICAL EDUCATION"

**2** = "1-15 MINUTES PER DAY"

**3** = "16-30 MINUTES PER DAY"

**4** = "31-60 MINUTES PER DAY"

**5** = "MORE THAN 60 MINUTES PER DAY"

-**1** = "NOT APPLICABLE"

-**7** = "REFUSED"

-**8** = "DON'T KNOW"

-**9** = "NOT ASCERTAINED"

;

value A2033F

**1** = "ONCE"

**2** = "TWICE"

**3** = "THREE OR MORE TIMES"

-**1** = "NOT APPLICABLE"

-**7** = "REFUSED"

-**8** = "DON'T KNOW"

-**9** = "NOT ASCERTAINED"

;

**run**;

**data** lib.Instruction;

infile in1 lrecl=**5934** n=**4**;

input

#**1**

@**1** CHILDID $8.

@**21** S2\_ID $4.

@**41** T1\_ID $7.

@**48** T2\_ID $7.

@**165** GENDER **2.**

@**167** RACE **2.**

@**188** R3SAMPLE **1.**

@**205** R4R2SCHG **2.**

@**211** R5R4SCHG **2.**

@**378** A1CLASS **1.**

@**1717** P1FIRKDG **2.**

@**2172** T5GLVL **2.**

#**2**

@**1148** A2OFTRDL **2.**

@**1150** A2TXRDLA **2.**

@**1152** A2OFTMTH **2.**

@**1154** A2TXMTH **2.**

@**1542** A2LAWS **2.**

@**1544** A2ECOLOG **2.**

@**1546** A2GEORPH **2.**

@**1548** A2SCMTHD **2.**

@**1550** A2SOCPRO **2.**

#**4**

;

IF (R3SAMPLE EQ **1** OR

R3SAMPLE EQ **0**) AND

(R4R2SCHG EQ **1** OR

T5GLVL EQ **2** OR

T5GLVL EQ **3** OR

T5GLVL EQ **4** OR

T5GLVL EQ **5** OR

T5GLVL EQ **6** OR

T5GLVL EQ **7** OR

T5GLVL EQ -**9** OR

T5GLVL EQ **.**);

label

CHILDID = "CHILD IDENTIFICATION NUMBER"

S2\_ID = "SPRING SCHOOL IDENTIFICATION NUMBER"

T1\_ID = "FALL TEACHER IDENTIFICATION NUMBER"

T2\_ID = "SPRING TEACHER IDENTIFICATION NUMBER"

GENDER = "CHILD COMPOSITE GENDER"

RACE = "CHILD COMPOSITE RACE"

R3SAMPLE = "R3 CHILD SUBSAMPLED IN ROUND 3"

R4R2SCHG = "R4 CHILD SCH CHANGE TYPE BTWN RNDS 2 & 4"

R5R4SCHG = "R5 CHILD SCH CHANGE TYPE BTWN RNDS 4 & 5"

A1CLASS = "A1 TEACHER DATA CLASS TYPE"

A2SNGDGT = "A2 Q32L ADD SINGLE-DIGIT NUMBERS"

A2SUBSDG = "A2 Q32M SUBTRACT SINGLE-DIGIT NUMBERS"

A2PLACE = "A2 Q32N PLACE VALUE"

A2TWODGT = "A2 Q32O READING TWO-DIGIT NUMBERS"

A23DGT = "A2 Q32P READING THREE-DIGIT NUMBERS"

A2MIXOP = "A2 Q32Q MIXED OPERATIONS"

A2GRAPHS = "A2 Q32R READING SIMPLE GRAPHS"

A2BODY = "A2 Q34A HUMAN BODY"

A2PLANT = "A2 Q34B PLANTS AND ANIMALS"

A2DINOSR = "A2 Q34C DINOSAURS AND FOSSILS"

A2ECOLOG = "A2 Q34S ECOLOGY"

A2GEORPH = "A2 Q34T GEOGRAPHY"

A2SCMTHD = "A2 Q34U SCIENTIFIC METHOD"

A2SOCPRO = "A2 Q34V SOCIAL-PROBLEM SOLVING"

;

format

A1CLASS A1CLASS.

A2OFTART A2029F.

A2OFTDAN A2029F.

A2OFTESL A2029F.

A2OFTFOR A2029F.

A2OFTHTR A2029F.

A2OFTMTH A2029F.

A2OFTMUS A2029F.

A2OFTRDL A2029F.

A2CRTIVE A2060F.

A2DICTAT A2060F.

A2MTHSHT A2060F.

A2ADD2DG A2061F.

A2ALPBTZ A2061F.

A2BODY A2061F.

A2BYD100 A2061F.

A2TEMP A2061F.

A2TEXTCU A2061F.

R4R2SCHG SCHG.

R5R4SCHG SCHG.

T5GLVL T501F.

R3SAMPLE TF.

P1FIRKDG YN89F.

;

**run**;

**quit**;