

Using SAS Macros

What is a SAS Macro?

- A SAS macro is a program, written in a special SAS macro programming language.
 - It is written by a SAS user, and is not supplied by SAS.
 - It can produce results that are not available directly in SAS procedures.
 - It can also select results produced by SAS procedures so that the user does not have to run the SAS procedure.
- You should **NEVER** modify the actual macro programming yourself!

How to use SAS Macros

- In order to use a SAS macro
 - You have to tell SAS where it is located;
 - You have to call it.

Telling SAS where Macros are located

- A SAS macro will have a particular name, and will be stored in a file of the same name.
- For example, the SAS macro %CI_for_r is stored in the file CI_for_r.sas.
 - (This macro produces various confidence intervals for the population correlation coefficient.)

Telling SAS where Macros are located

If you place all the files containing macros in this location:

```
C:\Documents and Settings\XYZ\My Documents\SAS Macros\
```

and place the following statements in the autoexec.sas file:

```
filename statmacs  
'C:\Documents and Settings\XYZ\My Documents\SAS Macros\';  
options mautosource sasautos=(statmacs, sasautos);
```

then you can call the macros when desired.

Calling SAS Macros

- As an example, the SAS macro %CI_for_r produces various confidence intervals for the population correlation coefficient.
- To use (or call) this macro, simply run this single line of code:

```
%CI_for_r(Data=A, Var=X Y, Alpha=.05);
```

- Here, X and Y are the names of variables stored in the SAS data set named “A”. In actuality, you would need to specify the name of the data set containing your data, along with the correct variable names.

Calling SAS Macros

- This single line of code that calls the SAS macro can be placed in the Program Editor in SAS.