Importing SAS, SPSS and Stata files into R¹

Your tasks in R will be easier if you clean and prepare your data in other packages. You will likely want to take care of missing values in these other packages as well (by either eliminating the cases, or imputing values). This document will show how to import data using Stata, SAS, and SPSS. Using Stata seems to be the most seamless. Creating an export file in not necessary, and the data are visible when using the "fix" command, as shown below. Please note: I have known of several cases in which mistakes are made by programs when importing data. Please check means and Ns of cases to make sure your translation is correct.

Before you can import data, you must first load the package "Foreign". To do this, click on "Packages", then "Load package...". Options will appear in a box entitled "Select One". Click on "foreign" and then OK. Or, you can also enter the command: library (foreign) in the console window.

Then you are ready to read data created by other programs.

The following shows how to read data created by Stata, SPSS, and SAS. Notice that the slashes are in a different direction than are usually used on a PC. The forward slash "/" slash must be used in defining locations of data in the current version of R (1.6). The backward slash is not recognized.

The "attach" command shown below allows the variables within the data set to be accessed. The "fix" command allows you to view the data editor (but this does not work well if an SPSS file has been imported).

STATA:

Within R, the following commands import Stata data, and create an object called 'pums1990'.

```
pums1990 = read.dta('c:/dl/pums1990.dta')
attach(pums1990)
fix(pums1990)
```

SPSS:

Within R, the following commands will import the SPSS portable file, and create an object called 'pums1990'.

```
pums1990 = read.spss('c:/dl/pums1990.sav')
attach(pums1990)
fix(pums1990)
```

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>	fix(pums1990)	<u>""</u>	, "н",	"Ĥ",	, "н",	"н",	"н",	"н",	"H"

SAS:

First, within SAS, an export file must be created.

```
** export.sas ;
libname library 'c:\all\classes\csss506\winter_2002\sas\saslib' ;
libname sasspss xport 'c:\dl\pums1990.xpt' ;
proc copy in= library out = sasspss ; select PUMS1990 ;
run ;
```

Within R, the following command will import the SAS export file, and create an object called 'pums1990'.

```
pums1990 = read.xport('c:/dl/pums1990.xpt')
attach(pums1990)
fix(pums1990)
```

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> pums1990 = read.dta('c:/dl/pums1990.dta')
> attach(pums1990)
> fix(pums1990)

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