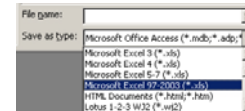


Moving Data from Access to SPSS

Export from Access to Excel

- FTP your database from the server to your computer and open the database in Access.
- For each table:
 - ☐ Single-click on the table.
 - ☐ File, Export, Save as Type: Excel 97-2003.xls



The Goal

- You have a web site that collects data.
- The data is going into an Access database.
- You want to use SPSS to analyze the data.
- Therefore: We need a way to get the data from Access into SPSS.

Convert to .SAV

- Turn on SPSS.
- For each Excel file:
 - ☐ File, Open (in SPSS)
 - ☐ Clean out the data and variables you don't want.
 - Data with too many missing values
 - Text fields with English in them
 - Date/Time fields (keep fields with total seconds)
 - ☐ Sort the file based on subject ID (Data, Sort cases). It doesn't matter whether you pick ascending or descending, just pick one and use it for each file.
 - ☐ Save the file as a .SAV file.

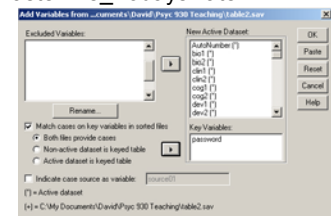
Technique #1: Use Office

- If your data was stored in an Access database and you have Access and Excel available, then this process is easy.
- The hard way is shown a few slides from now.

Bring It All Together

- Turn on SPSS and start with a blank document.
- Open any one of your data files and save it with a new name like MasterFile_TodaysDate.

- For each .SAV file:
 - ☐ Data, Merge files, Add variables. Repeat.
 - ☐ SPSS automatically matches subject IDs!!!!



Bring It All Together

- Save the file. It is now your master file with all your data.
- Save the file again under a different name before you do anything!!! That way you can always start over again with the master file.

Using CSVs

- CSVs are a great way to pass data from one program to another.
- Example:
 - You inherit an old data file written in some old program no one uses anymore.
 - Open the data file in the old program and Save As a CSV file.
 - Open the file using Excel and, since Excel understands CSV files, it will import the file with no problem!
- What is the one problem with this plan?

Technique #2: A General Method

- What if your data is not in Access? What if it is in MySQL or Postgres or some other database?
- Fortunately, there are a couple of universal formats that every database program, spreadsheet, and SPSS can read.
- Short version: Export data from the database in one of the universal formats. Import into SPSS.

The Flaw

- Since CSVs use commas to separate variables, if any occurrence of a variable contains a comma, it will throw the system out of alignment.
name, age, gender, score
cat, kitty, 24, M, 97
puppy, 19, F, 92
- “kitty” will be recorded as cat’s age!
- CSV files are good for numbers, not text.

CSVs

- CSV stands for Comma Separated Variables.
- A CSV file is a text file (pure text, like that produced by Textpad) that contains one record per row, with each variable on each line separated by a comma.
- It is common to have variable names on the first row.
name, age, gender, score
Kitty, 24, M, 97
Puppy, 19, F, 92

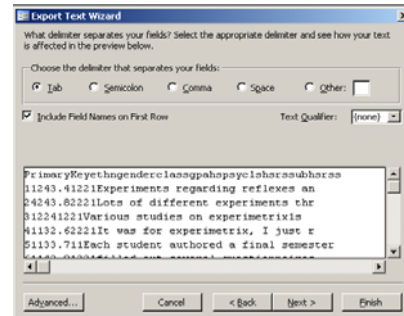
Tab-Delimited Files

- “Delimited” means “to define the limits of”.
- CSV files contain comma-delimited data.
- We saw the problem with using commas on the previous slide.
- Tab-delimited files solve this problem by using tabs to separate variables.
kitty, cat 24 M 97
puppy 19 F 92
- Sometimes, tab-delimited files are still referred to as CSV files.

Why Use Tab-Delimited Files?

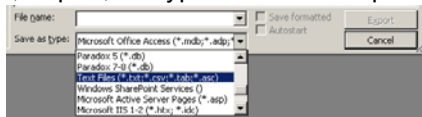
- The nice thing about tab-delimited files and web-gathered data is that data from a web page won't have tabs in it.
- When you hit the tab key in a form, it always takes you to the next form element; it never puts a tab in the text box.
- Fortunately, tab-delimited files are as universally understood as CSV files. Almost every program: word processor, spreadsheet, and database, can read them.

Example: Selecting Options



Example: Out of Access

- We will use tab-delimited files to send our data to SPSS. Remember, it is easier to do this using Technique #1.
- Open the database and single-click on any table.
- File, Export, file type: text files. Export.

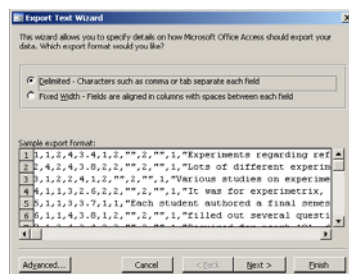


Example: Selecting Options

- Usually, you will choose tab delimited.
- If you "include field names on first row" then other databases, Excel, and SPSS will put your data under the correct names. If your destination file already has that information, then don't check this.
- Text Qualifier appears to be useless! Always select "{none}".

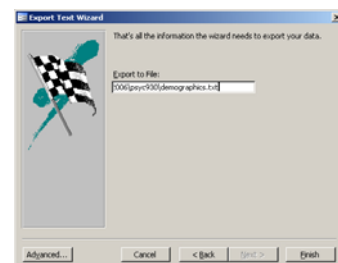
Example: Delimited

- Choose delimited.
- I've never seen a use for "fixed width".



Example: Finishing Up

- Finish by choosing the destination file name.



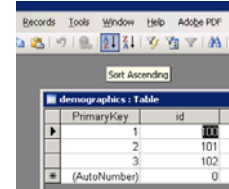
Example: Result

PrimaryKey	ethn	gender	class	gpa	hspsyscls
1	1	2	4	3.40	1
2	4	2	4	3.80	2
3	1	2	2	4.00	1
4	1	1	3	2.60	2
5	1	1	3	3.70	1
6	1	1	4	3.80	1

- Note: Data doesn't always appear to be lined up to your eye. PrimaryKey pushes ethn over so everything is off by one to our eyes. The computer doesn't "see" it just counts tabs so there is no problem here.

Detailed Instructions

1. Open one of the tables you want to merge in Access. Sort by subject ID by clicking on that column and clicking the AZ↓ button. The IDs should now be sorted from smallest to largest.



Example: Importing

- To use your tab-delimited file, most programs will let you File, Import.
- Excel: File, Open, file type: Text Files.
- Access: File, Get external data, Import.
- SPSS: File, Open, Data, file type: Text
- Sometimes you have to answer various questions that are the same as the exporting process, e.g. delimited, tabs, etc.

Detailed Instructions

2. Close the table (and save when it asks).
3. Do steps 1 and 2 for each table you want to merge. Note that it doesn't matter when you sort ascending or descending, but you need to do it the same way for each table.

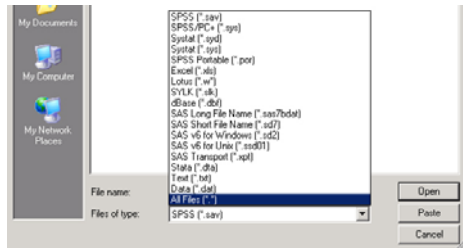
Detailed Instructions
for
Moving Data
from
Access to SPSS
via
Tab-Delimited Files

Detailed Instructions

4. Click once on one of the tables so that it is highlighted.
5. Go to File, Export, and export the data as a tab-delimited file, as described earlier in this presentation.
6. Repeat step 5 for each table you want to merge.

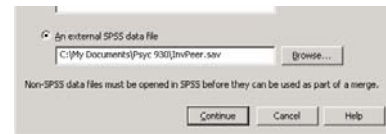
Detailed Instructions

- Go to SPSS. File, Open, Data. Change the file type to be all files or *.txt files.



Detailed Instructions

- Browse for one of the other .SAV files you made in step 8. Either double-click it or single-click it and click Open.
- Click the continue button.



Detailed Instructions

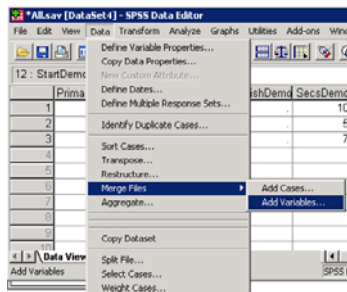
- Find one of the files you saved in step 5 and open it in SPSS. Now save it as a .SAV file.
- Repeat steps 7 and 8 for each file.
- Pick which file you want to be first. (It doesn't matter.) Open it in SPSS and then save it under a different name (e.g., AllData.sav).

Detailed Instructions

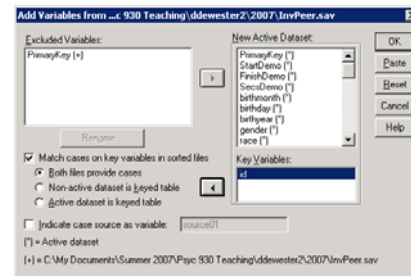
- Under New Active Dataset, SPSS should have kept the existing variables and also added the new variables from the file you just selected.
- Check the "Match cases on key variables in sorted files" box.
- Single click on the subject ID variable and click the arrow to the left of the Key Variables box.

Detailed Instructions

- Leave that file open. Go to Data, Merge Files, Add Variables.



Detailed Instructions



Detailed Instructions

17. Click OK. If you get a warning box about keyed match will fail..., just Click OK. This warning is the reason for sorting in Step 1. Say "Yes" to the next question.
- Your variables should have been added after the existing variables. SPSS matched up subject IDs for you.