

ARL Workshop
Qualtrics to SPSS:
Tricks to Improve the Process

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June 23, 2011

Stabley 201

Topics

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Accessing the Qualtrics Practice File

- 1) Log into your Qualtrics account.
- 2) Click on the “My Surveys” tab.
- 3) Locate the survey: “Practice File for Qualtrics to SPSS Tricks Workshop 2011/06/23”.
- 4) Click on the “Copy” icon to the right of the survey name.

★	Active	Name	Responses	Tasks						
Group: Indiana University of Pennsylvania Surveys										
★	☐	Practice File for Qualtrics to SPSS Tricks Workshop 2011/06/23 Modified on: Jun 15, 2011	0	 Edit	 Results	 Send	 View	 Copy	 Translate	 Delete



5) In the “Copy to” box, select “My Account or Group Account.”

In the “Destination” box, select “My Account.”

6) Click on “Copy”.

Copy Survey - Practice File for Qualtrics to SPSS Tricks Workshop 2011/06/23

Survey name:

Copy to:

Destination:

Folder:

7) Open up the copied survey: “Practice File for Qualtrics to SPSS Tricks Workshop 2011/06/23 – Copy.”

Basic Qualtrics Structure-Blocks

This survey consists of three blocks

- Default Block with No Questions
 - You could delete it. I didn't.
- Block called “Demographics” with three questions (i.e. items)
 - Two multiple choice items and one text entry items
- Block called “Feedback on the Enrollment Process” with one question
 - Item in Matrix Table format

Detailed Look at the Second Block

- Block called “**Demographics**” with three questions (i.e. items)

▼ Demographics

Q2 ☐

Please state your level of comfort with computers.

☐ I am very uncomfortable with computers.

☐ I am somewhat uncomfortable with computers.

☐ I am somewhat comfortable with computers.

☐ I am very comfortable with computers.

Q1 ☐

Please specify your department.

Q3 ☐

Please indicate reasons why you enrolled for this workshop (Check all that apply)

☐ I will be using this in my research.

☐ I love to learn about software packages.

☐ I am applying for promotion.

☐ Other. Please specify.

Multiple Choice
(Single Answer)

Text Entry

Multiple Choice
(Multiple Answer)

Detailed Look at the Third Block

Block called “Feedback on the Enrollment Process” with one question

– Item in Matrix Table format

▼ Feedback on the Enrollment Process

Block Options ▼

Q4 ☐

For the enrollment process, indicate the extent to which you were dissatisfied or satisfied with that aspect of the enrollment process.

	Very Dissatisfied	Somewhat Dissatisfied	Somewhat Satisfied	Very Satisfied	Unable to Judge
Clarity of the process for enrolling in the workshop	☐	☐	☐	☐	☐
Ease of enrolling for the workshop	☐	☐	☐	☐	☐
Timeliness of reminders for the workshop.	☐	☐	☐	☐	☐

Qualtrics and SPSS Terminology

Qualtrics

- a) Export Tag
- b) Question Text
- c) Answers
- d) Codes

SPSS

- default Variable Name
- default Variable Label
- default Value Labels
- default Values

a) 

Q2 ☒

d)

Please state your level of comfort with computers.  **b)**

1 ☐ I am very uncomfortable with computers.

2 ☐ I am somewhat uncomfortable with computers.

3 ☐ I am somewhat comfortable with computers.

4 ☐ I am very comfortable with computers.

c)

Exercise 1

Identify

- a) default variable name(s)
- b) the default variable label(s)
- c) the default value labels
- d) the default values

b)

Q3 ☐

Q3_1

Q3_2

Q3_3

Q3_4

Q3_4_TEXT

Please indicate reasons why you enrolled for this workshop (Please check all that apply)

- ☐ I will be using this in my research.
- ☐ I love to learn about software packages.
- ☐ I am applying for promotion.
- ☐ Other. Please specify.

c) And d)

Each of the four choices becomes a separate variable.

d) Qualtrics assigns a "1" for the variable value if the respondent selects the choice and a missing value if the respondent does not select the choice.

c) No value labels are assigned by Qualtrics.

Exercise 2

Identify

- a) default variable name(s)
- b) the default variable label(s)
- c) the default value labels
- d) the default values

Note: This is one Qualtrics item
BUT three SPSS variables.

b) Concatenate the main text
and the individual text

Q4		For the enrollment process, indicate the extent to which you were dissatisfied or satisfied with that aspect of the enrollment process.				
		c)				
		Very Dissatisfied	Dissatisfied	Somewhat Dissatisfied	Somewhat Satisfied	Unable to Judge
a)	Q4_1	☐	☐	☐	☐	☐
	Q4_2	☐	☐	☐	☐	☐
	Q4_3	☐	☐	☐	☐	☐
		d) 1	2	3	4	5

Editing In Qualtrics—Variable Names (Export Tags)

- Recommendation: Use very simple export tags. D1, D2, D3 for items in the “Demographics” block, F1 for the item in the “Feedback on the Enrollment Process” block.
- Can use the “Advanced Options”
 - “Auto-Numbering Questions” option
 - “Block Numbering” option .
 - Results in: Q2.1, Q2.2, Q2.3, and Q3.1

Editing In Qualtrics--Variable Labels

- 1) Click on the question text, hover over the icon in the left bottom corner of the question text box, then click on “Edit Question Label.”
- 2) Change the label to a short descriptive phrase.
 - Only partially effective for “Matrix Table” and “Side by Side” question types, because you can edit the main text of the question but not the individual text for the sub-items.

Q4 

For the enrollment process, indicate the extent to which you were dissatisfied or satisfied with that aspect of the enrollment process.

	Very Dissatisfied	Dissatisfied	Somewhat Dissatisfied	Somewhat Satisfied	Unable to Judge
Clarity of the process for enrolling in the workshop	☐	☐	☐	☐	☐
Ease of enrolling for the workshop	☐	☐	☐	☐	☐
Timeliness of reminders for the workshop.	☐	☐	☐	☐	☐

Editing In Qualtrics--Value Labels

- 1) Click on the question text, then click on the purple rectangle under the export tag.
- 2) Click on the Recode Values option, then click on the “Variable Naming” check box.

Note: You can also recode the numerical values.

Editing In Qualtrics--Value Labels

- 3) Finally edit the value labels in the first column. This will not change the text that the subjects see (text in the grey boxes).

Recode Values

☐ Recode Values ☒ Variable Naming

very uncomfortable	I am very uncomfortable with computers.
somewhat uncomfortable	I am somewhat uncomfortable with computers.
somewhat comfortable	I am somewhat comfortable with computers.
very comfortable	I am very comfortable with computers.

 Close

Editing In Qualtrics— Excluding an answer from the analysis (last survey item)

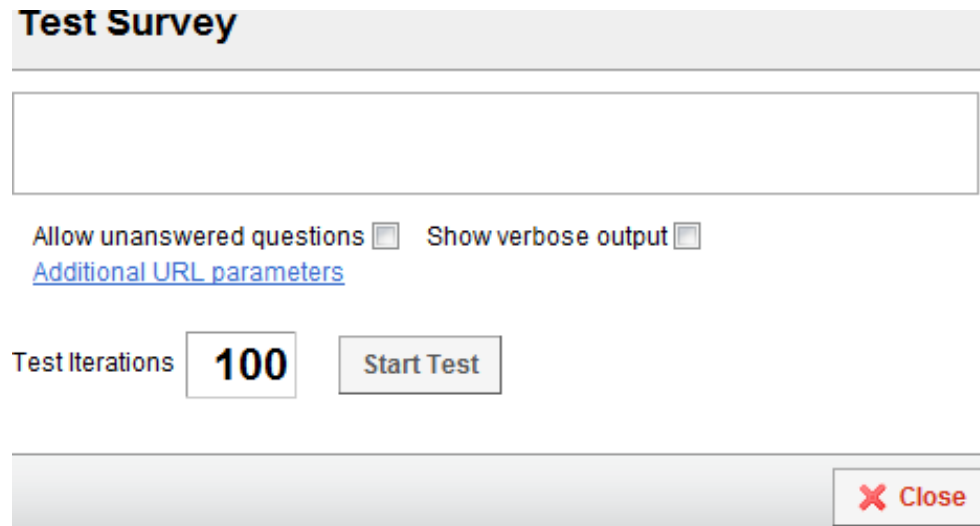
- Responses such as “Unable to Judge”, or “Not Applicable,” should be excluded from the analysis.
 - very important when the series of Likert items are being combined to form a scale.
- 1) In Qualtrics, click on the response that is to be excluded, then click on the down arrow in the blue box behind the answer and select the “Exclude From Analysis” option.

Note: This works when using the report feature in Qualtrics to look at the data. It will NOT transfer over to the SPSS syntax file nor to the SPSS data file.

Generating Test Data in Qualtrics

- After you have completed your survey, create test data so that you can see what the Qualtrics reports and the downloaded SPSS files will look like.
- “Advanced Options” button → “Test Survey” option

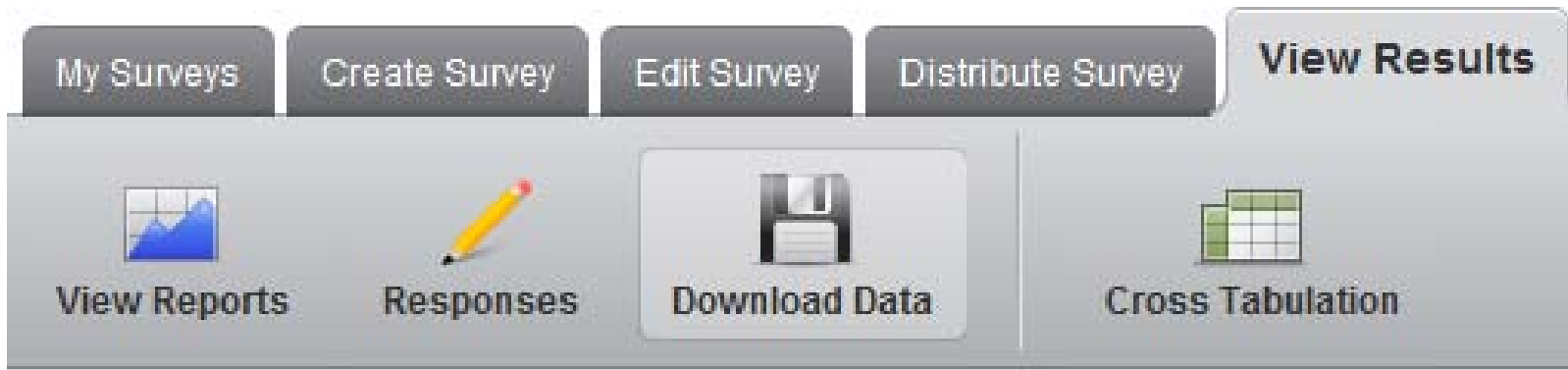
Then specify 100 iterations by replacing the “5” with “100” in the “Test iterations” box. Finally click on “Start Test.”



The screenshot shows the 'Test Survey' dialog box in Qualtrics. It has a title bar 'Test Survey' and a large empty text area for a message. Below the text area are two checkboxes: 'Allow unanswered questions' and 'Show verbose output', both of which are unchecked. There is a link for 'Additional URL parameters'. At the bottom, there is a 'Test Iterations' label next to a text box containing the number '100', and a 'Start Test' button. A 'Close' button with a red 'X' icon is located in the bottom right corner.

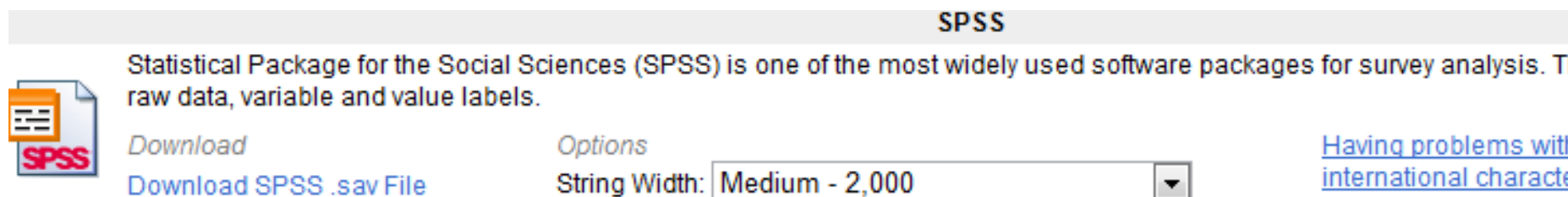
Exporting to SPSS

- 1) Click on the grey “View Results” tab.
- 2) Click on the “Download Data” button in the grey bar.



Step1: Exporting the SPSS Data File

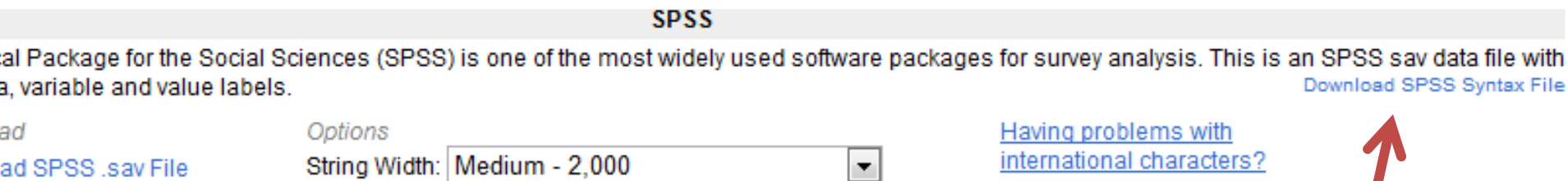
- 1) Scroll down to the “SPSS” section.
- 2) Click on the “Download SPSS .sav File” option.



- 3) When the “File Download” window opens, click on the “Open” button.
- 4) Click on the “Allow” button when the firewall attempts to stop the download.
- 5) Then click on “Yes” on the next screen.

Step 2: Exporting the SPSS Syntax File

- 1) Return to the “SPSS” section.
- 2) Click on the “Download SPSS Syntax File” option.
- 3) Again, click on the “Download the Syntax File” option.
- 4) When the “File Download” window opens, click on the “Open” button.
- 5) Click on the “Allow” button when the firewall attempts to stop the download.
- 6) Then click on “Yes” on the next screen.



Why Use a syntax file?

- It can be generated, edited, saved, and then used to quickly rerun all of the operations without running through menus.
- It serves as a record of what tasks were performed on the data and what analyses were run.
- It can not unfortunately record the editing of graphs and tables.

Important Fix When Using Block Numbering (Q1.1, Q1.2,...,Q2.1, etc)

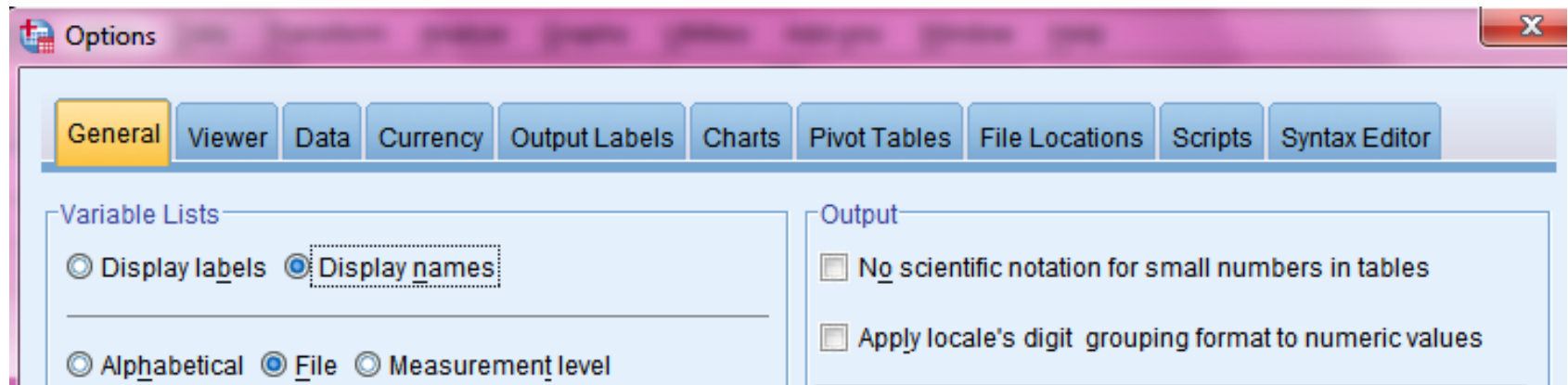
- Bug in Qualtrics:
 - Downloaded data file renames the variables by replacing the period with an underscore.
I.e. Q1_1, Q1_2, etc.
 - Syntax File does not replace the periods.
I.e. Q1.1, Q1.2, etc.
 - You can avoid this problem by editing the export tags (clicking on each one and changing the text to simple tags like D1, D2, D3, and F1).

Open Up SPSS

Changing an option: Display the variable names for Variable lists, rather than the Variabal Labels.

“Edit” pull-down menu → “Options”

Then select the “General” tab.



Important Fix Continued

- 1) Highlight the variable names in “Variable View” of the SPSS data file and press [ctrl] [c]

	Name
10	V10
11	Q2_1
12	Q2_2
13	Q2_3_1
14	Q2_3_2
15	Q2_3_3
16	Q2_3_4
17	Q2_3_4_TEXT
18	Q3_1_1
19	Q3_1_2
20	Q3_1_3
21	
	1
Data View	Variable View

2) Go to the syntax file. Open up a new line after the SUBTITLE command and type:

RENAME VARIABLES (

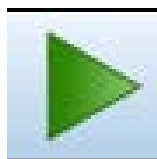
3) Type [Ctrl] [V] to paste in the variable names, then type =

4) Type [Ctrl] [V], then type
). ← Include the Period

5) Replace the first underscore with a period in every variable name after the “=” sign.

6) In the syntax window, highlight and syntax for the entire command.

7) Then click the green “run” button.



```
SUBTITLE "Workshop Qualtrics to SPS:  
RENAME VARIABLES (Q2_1  
Q2_2  
Q2_3_1  
Q2_3_2  
Q2_3_3  
Q2_3_4  
Q2_3_4_TEXT  
Q3_1_1  
Q3_1_2  
Q3_1_3  
=Q2.1  
Q2.2  
Q2.3_1  
Q2.3_2  
Q2.3_3  
Q2.3_4  
Q2.3_4_TEXT  
Q3.1_1  
Q3.1_2  
Q3.1_3).
```

5) The first underscore in each of these lines is replaced with a period.

Simplifying the Variable Labels for Items Using Matrix Table Formats

Just edit the Variable Labels. So

Q3.1_1 "satisfaction with-Clarity of the process for enrolling in the workshop "

Q3.1_2 "satisfaction with- with-Ease of enrolling for the workshop "

Q3.1_3 "satisfaction with-Timeliness of reminders for the workshop "

becomes:

Q3.1_1 "satisfaction-Clarity of enrolling"

Q3.1_2 "satisfaction-Ease of enrolling"

Q3.1_3 "satisfaction-Timeliness of reminders"

Now highlight and run the remaining commands in the syntax file.



Additional Changes

Variable Type, Number of Decimals, Missing Values

- Qualtrics often
 - assigns an incorrect variable type (nominal, ordinal, scale)
 - Formats numbers with 2 places after the decimal point.
 - Never assigns missing values, even when you use the “Exclude From Analysis” option in Qualtrics.

Current “Variable View”

Note download errors

	Name	Type	Width	Decimals	Label	Values	Missing	Measure
11	Q2.1	Numeric	8	0	comfort with computers.	{1, very un...	None	Scale
12	Q2.2	String	2000	0	department.	None	None	Nominal
13	Q2.3_1	Numeric	8	0	reasons enrolled-research.	None	None	Scale
14	Q2.3_2	Numeric	8	0	reasons enrolled-software packages.	None	None	Scale
15	Q2.3_3	Numeric	8	0	reasons enrolled-promotion.	None	None	Scale
16	Q2.3_4	Numeric	8	0	reasons enrolled-Other.	None	None	Scale
17	Q2.3_4_TEXT	String	2000	0	reasons enrolled-Other.-TEXT	None	None	Nominal
18	Q3.1_1	Numeric	8	0	satisfaction-Clarity of enrolling	{1, Very D.	None	Scale
19	Q3.1_2	Numeric	8	0	satisfaction-Ease of enrolling	{1, Very D.	None	Scale
20	Q3.1_3	Numeric	8	0	satisfaction-Timeliness of reminders.	{1, Very D.	None	Scale

Should be
Nominal.

Should be
Nominal.

Make sure the number of
digits after the decimal
point is correct.

5 (Unable to Judge) Should
be a Missing Value.

Should be
Ordinal.

Current “Data View”

Q2.1	Q2.2	Q2.3_1	Q2.3_2	Q2.3_3	Q2.3_4	Q2.3_4_TEXT	Q3.1_1	Q3.1_2	Q3.1_3
3	Test Response - Mon,...	1	1	.	.		1	5	4
1	Test Response - Mon,...	1	1	.	.		4	1	1
1	Test Response - Mon,...	.	1	1	.		4	1	3
4	Test Response - Mon,...	1	.	.	1	Test Response - Mon,...	4	4	1
3	Test Response - Mon,...	1	1	1	1	Test Response - Mon,...	4	2	1
4	Test Response - Mon,...	1	.	1	1	Test Response - Mon,...	2	5	4
3	Test Response - Mon,...	.	1	1	1	Test Response - Mon,...	2	1	4
3	Test Response - Mon,...	.	1	1	.		2	3	2

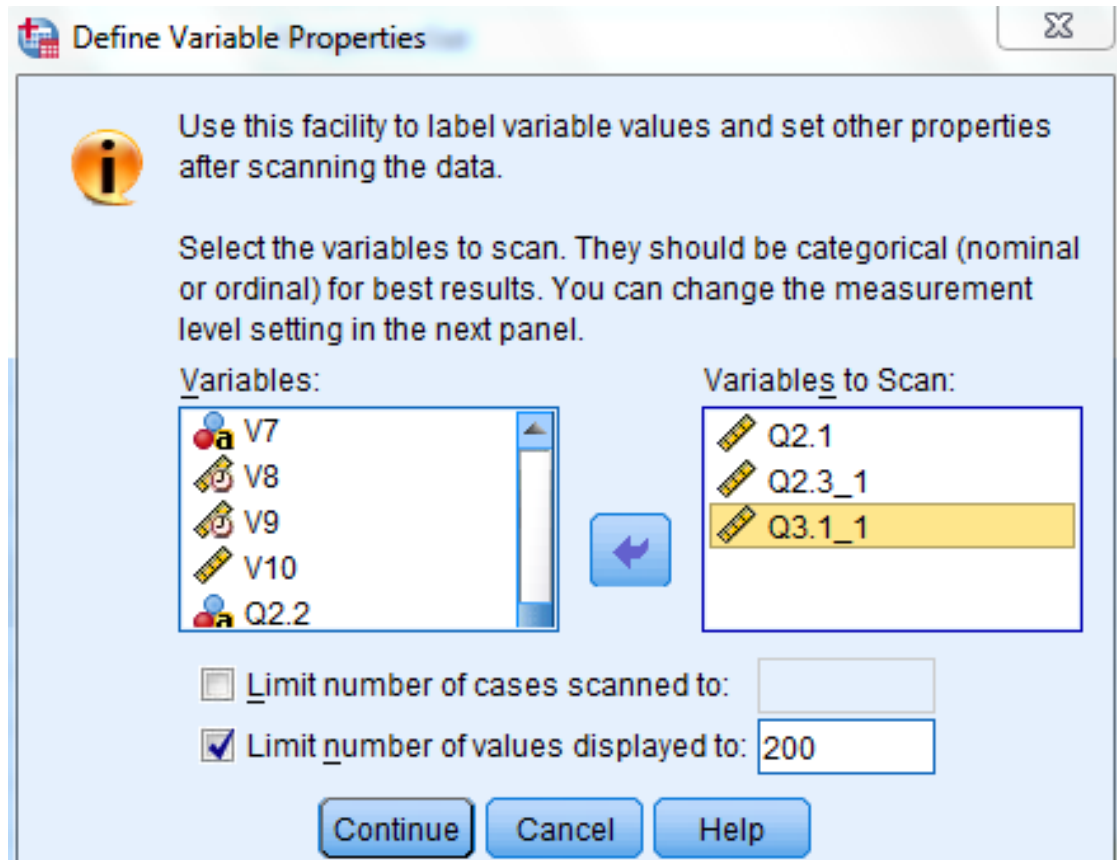
If the respondent selected the option, Qualtrics assigns a value of 1. Otherwise, Qualtrics assigns a blank (missing value)

We will eventually ask SPSS to recode the missing values as 0.

Additional Changes

Variable Type, Number of Decimals, Missing Values

- The best way to make these corrections:
- 1) “Data” pull-down menu → “Define Variable Properties...” option.
 - 2) Then choose the items that need corrections.
 - 3) Click on the “Continue” button.



Define Variable Properties

1) Select the first item on the list

2) Change the measurement level from Nominal to Ordinal

Scanned Variable List

Un...	Me...	Role	Variable
☐			Q2.1
☐			Q2.3_1
☐			Q3.1_1

Current Variable: Q2.1

Label: comfort with computers.

Measurement Level: Nomi...

Role: Input

Type: Numeric

Width: 8 Decimals: 0

Unlabeled values: 0

Attributes...

Value Label grid: Enter or edit labels in the grid. You can enter additional values at the bottom.

	Changed	Missing	Count	Value	Label
1	☐	☐	25	1	very uncomfortable
2	☐	☐	16	2	somewhat uncomfortable
3	☐	☐	28	3	somewhat comfortable
4	☐	☐	31	4	very comfortable
5	☐	☐			

3) Select the second item (Q2.3_1) on the “Scanned Variable List”.

1) Change measurement level from Scale to Nominal.

Current Variable: Q2.3_1 Label: reasons enrolled-research.

Measurement Level: Scale

Role: Input

Unlabeled values: 1

Type: Numeric Width: 8 Decimals: 0

Attributes...

Value Label grid: Enter or edit labels in the grid. You can enter additional values at the bottom.

	Changed	Missing	Count	Value	Label
1	☐	☐	77	1	Selected
2	☐	☐		0	Not Selected

Copy Properties:

Unlabeled Values:

OK Paste Reset Cancel Help

2) Add value.

3) Add labels.

4) Select the third item (Q3.1_1) on the scanned Variable List.

1) Change to Ordinal

Current Variable: Q3.1_1 Label: satisfaction-Clarity of enrolling

Measurement Level:  Ordinal Suggest Type: Numeric Width: 8 Decimals: 0

Role: Input Unlabeled values: 0 Atttributes...

Value Label grid:  Enter or edit labels in the grid. You can enter additional values at the bottom.

	Changed	Missing	Count	Value	Label
1	☐	☐	16	1	Very Dissatisfied
2	☐	☐	15	2	Somewhat Dissatisfied
3	☐	☐	25	3	Somewhat Satisfied
4	☐	☐	24	4	Very Satisfied
5	☐	☒	20	5	Unable to Judge
6	☐	☐			

Copy Properties Unlabeled Values

From Another Variable... To Other Variables... Automatic Labels

OK Paste Reset Cancel Help

2) Mark this value as "Missing."

3) Click on the "Paste" button

Resulting Syntax

Unedited

```
*Q2.1.  
VARIABLE LEVEL Q2.1(NOMINAL).  
  
*Q2.3_1.  
VARIABLE LEVEL Q2.3_1(NOMINAL).  
  
VALUE LABELS Q2.3_1  
  1 'Selected'  
  0 'Not Selected'.  
  
*Q3.1_1.  
VARIABLE LEVEL Q3.1_1(ORDINAL).  
  
MISSING VALUES Q3.1_1(5).
```

Edited

```
*Q2.1.  
VARIABLE LEVEL Q2.1(NOMINAL).  
  
*Q2.3_1 to Q2.3_4.  
VARIABLE LEVEL Q2.3_1 TO Q2.3_4(NOMINAL).  
  
VALUE LABELS Q2.3_1 TO Q2.3_4  
  1 'Selected'  
  0 'Not Selected'.  
  
*Q3.1_1 to Q3.1_3.  
VARIABLE LEVEL Q3.1_1 TO Q3.1_3(ORDINAL).  
  
MISSING VALUES Q3.1_1 TO Q3.1_3(5).
```

Use the “TO”
keyword
To extend the
properties to
every variable in a
sequence.

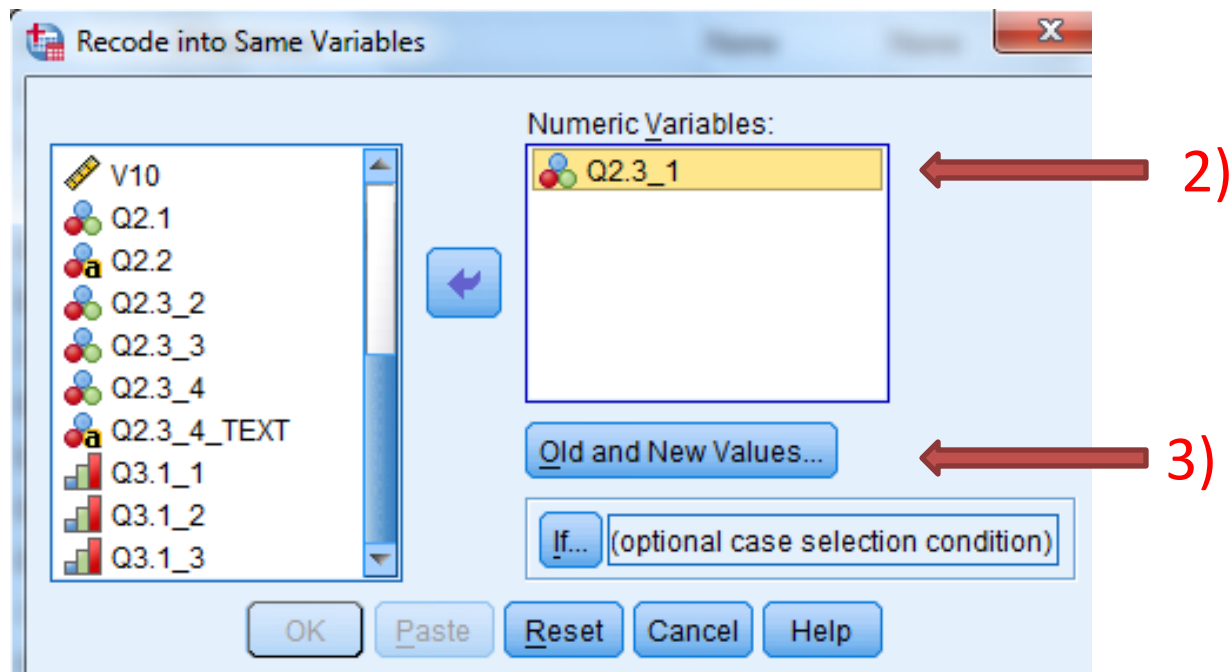
Highlight the edited text and click on the green “run” button.



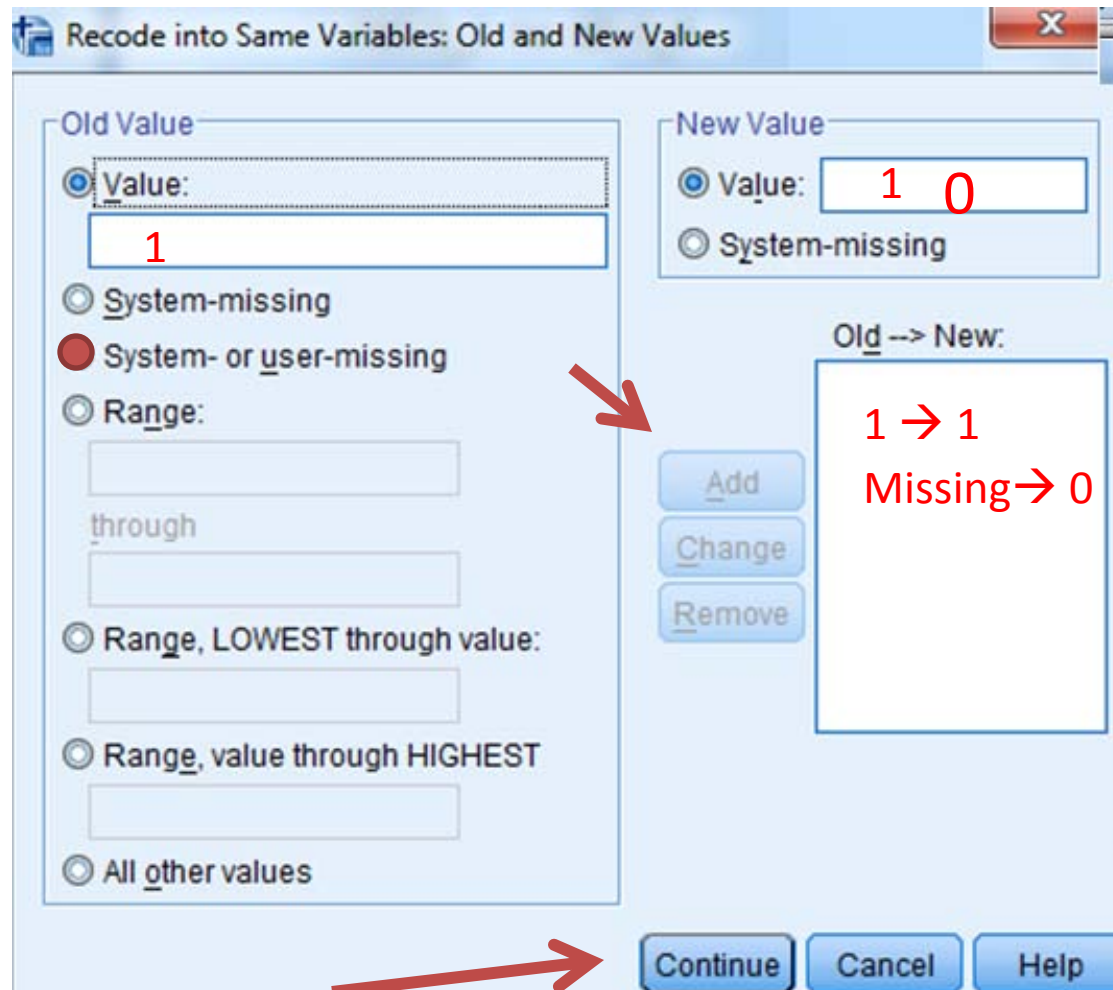
Correcting the “check all that apply” items

Missing Values → 0

- 1) “Transform” pull-down menu → “Recode Into Same Variables” option.
- 2) Select the variable for the first answer. (Q2.3_1)
- 3) Click on the “Old and New Values” button



- 4) Type “1” in the “Value” box for both “Old Value” and “New Value.” Then click the “Add” button.
- 5) Select the “System- or user-missing” radio button and type “0” in the New Value “Value” box. Then click the “Add” button.
- 6) Click on “Continue” button. Then click on the “Paste” button.



The image shows the "Recode into Same Variables: Old and New Values" dialog box in SPSS. The "Old Value" section on the left has the "Value:" radio button selected, with the value "1" entered in the text box. The "System- or user-missing" radio button is also selected. The "New Value" section on the right has the "Value:" radio button selected, with the value "0" entered in the text box. The "System-missing" radio button is also selected. The "Old --> New:" list on the right shows the mapping "1 → 1" and "Missing → 0". The "Add" button is highlighted with a red arrow. The "Continue" button is highlighted with a red arrow.

Recode into Same Variables: Old and New Values

Old Value

☒ Value: 1

☐ System-missing

☒ System- or user-missing

☐ Range:

through

☐ Range, LOWEST through value:

☐ Range, value through HIGHEST

☐ All other values

New Value

☒ Value: 0

☐ System-missing

Old --> New:

1 → 1

Missing → 0

Add

Change

Remove

Continue

Cancel

Help

7) The following syntax will appear at the bottom of the syntax window:

```
RECODE Q2.3_1 (1=1) (MISSING=0).
```

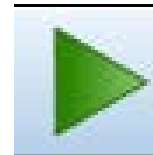
```
EXECUTE.
```

8) Replace **Q2.3_1** with **Q2.3_1 TO Q2.3_4**.

```
RECODE Q2.3_1 TO Q2.3_4 (1=1) (MISSING=0).
```

```
EXECUTE.
```

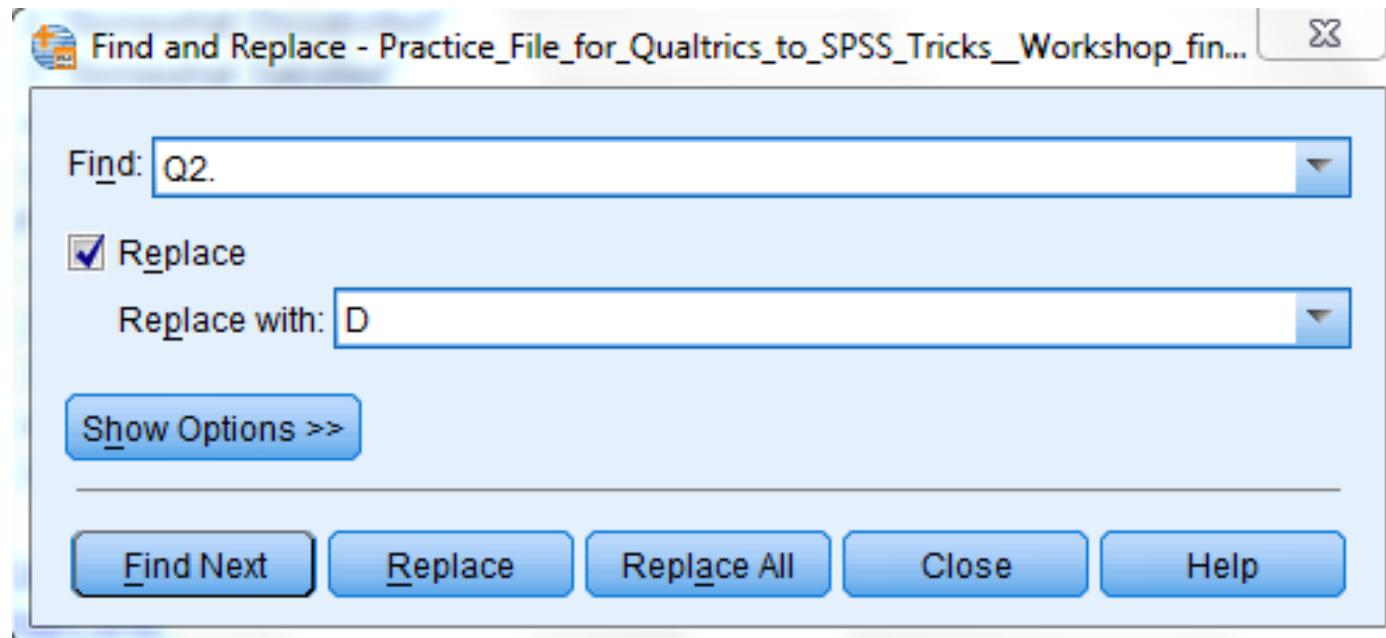
9) Highlight and run the syntax.



Simplifying the Variable Names

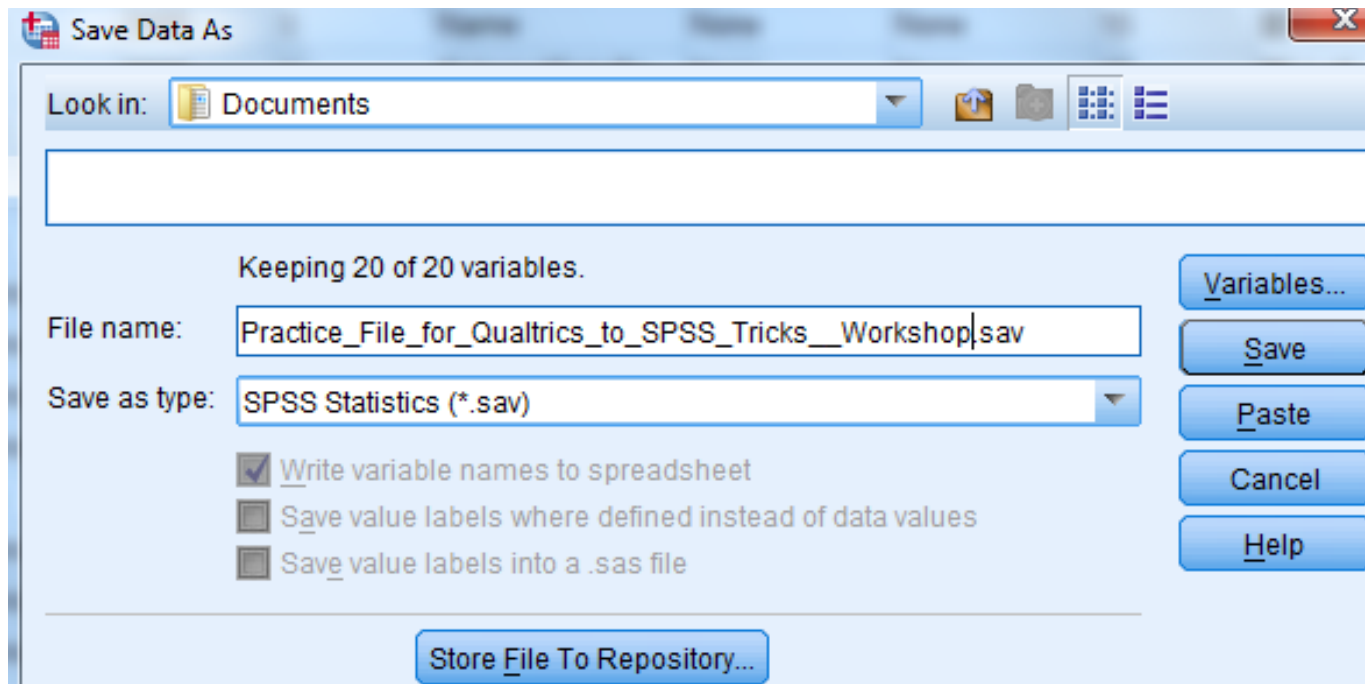
Q2. → D and Q3. → F

- 1) While in the “Syntax” window: type [Ctrl] [H]
- 2) Put “Q2.” in the “Find” box and Put “D” in the “Replace With” box.
- 3) Click on the “Replace All” button
- 4) Repeat steps 2) and 3) for “Q3.” and “F”.



Adding syntax to save the data file

- 1) While in the “Data Editor” window, click on the “File” pull down menu → “Save As” option
- 2) Choose where the SPSS data file should be stored.
- 3) Click on the “Paste” button.



Strategy

- 1) Save your completed syntax file.
- 2) When all of your data is collected, download your data to an SPSS.sav file (see Slide 18).
- 3) Open the syntax file from 1).
- 4) Highlight all the syntax and run it.