

LISGEN Web-Based Table 1 Formatter and Macro

<http://www.cba.ua.edu/~ckacmar/12>

In honor of MGT 698, Spring 2008

The University of Alabama

Casey, Chenwei, David, and Paul

Roll Tide!

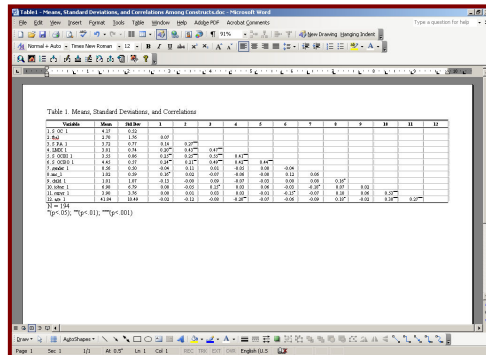


Table 1. Means, Standard Deviations, and Correlations

Variable	Mean	Std. Dev.	1	2	3	4	5	6	7	8	9	10	11	12
1. LOC	1.70	0.70												
2. PA	1.70	0.70	0.20**											
3. SMC	1.70	0.70	0.20**	0.20**										
4. SMC_1	1.70	0.70	0.20**	0.20**	0.20**									
5. SMC_2	1.70	0.70	0.20**	0.20**	0.20**	0.20**								
6. SMC_3	1.70	0.70	0.20**	0.20**	0.20**	0.20**	0.20**							
7. SMC_4	1.70	0.70	0.20**	0.20**	0.20**	0.20**	0.20**	0.20**						
8. SMC_5	1.70	0.70	0.20**	0.20**	0.20**	0.20**	0.20**	0.20**	0.20**					
9. SMC_6	1.70	0.70	0.20**	0.20**	0.20**	0.20**	0.20**	0.20**	0.20**	0.20**				
10. SMC_7	1.70	0.70	0.20**	0.20**	0.20**	0.20**	0.20**	0.20**	0.20**	0.20**	0.20**			
11. SMC_8	1.70	0.70	0.20**	0.20**	0.20**	0.20**	0.20**	0.20**	0.20**	0.20**	0.20**	0.20**		
12. SMC_9	1.70	0.70	0.20**	0.20**	0.20**	0.20**	0.20**	0.20**	0.20**	0.20**	0.20**	0.20**	0.20**	

p<.05. *p<.001.

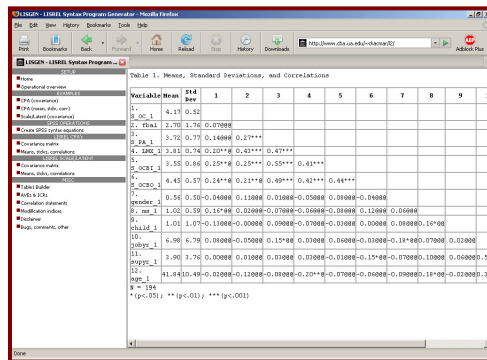
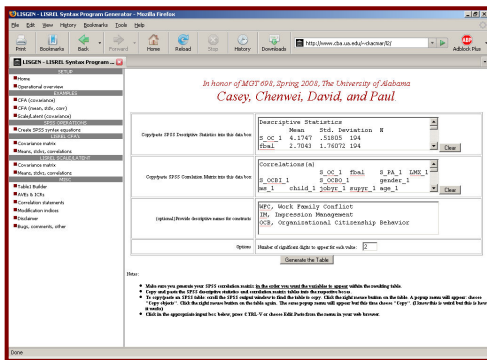


Table 1. Means, Standard Deviations, and Correlations

Variable	Mean	Std. Dev.	1	2	3	4	5	6	7	8	9	10	11	12
1. LOC	1.70	0.70												
2. PA	1.70	0.70	0.20**											
3. SMC	1.70	0.70	0.20**	0.20**										
4. SMC_1	1.70	0.70	0.20**	0.20**	0.20**									
5. SMC_2	1.70	0.70	0.20**	0.20**	0.20**	0.20**								
6. SMC_3	1.70	0.70	0.20**	0.20**	0.20**	0.20**	0.20**							
7. SMC_4	1.70	0.70	0.20**	0.20**	0.20**	0.20**	0.20**	0.20**						
8. SMC_5	1.70	0.70	0.20**	0.20**	0.20**	0.20**	0.20**	0.20**	0.20**					
9. SMC_6	1.70	0.70	0.20**	0.20**	0.20**	0.20**	0.20**	0.20**	0.20**	0.20**				
10. SMC_7	1.70	0.70	0.20**	0.20**	0.20**	0.20**	0.20**	0.20**	0.20**	0.20**	0.20**			
11. SMC_8	1.70	0.70	0.20**	0.20**	0.20**	0.20**	0.20**	0.20**	0.20**	0.20**	0.20**	0.20**		
12. SMC_9	1.70	0.70	0.20**	0.20**	0.20**	0.20**	0.20**	0.20**	0.20**	0.20**	0.20**	0.20**	0.20**	

p<.05. *p<.001.



In honor of MGT 698, Spring 2008, The University of Alabama
Casey, Chenwei, David, and Paul

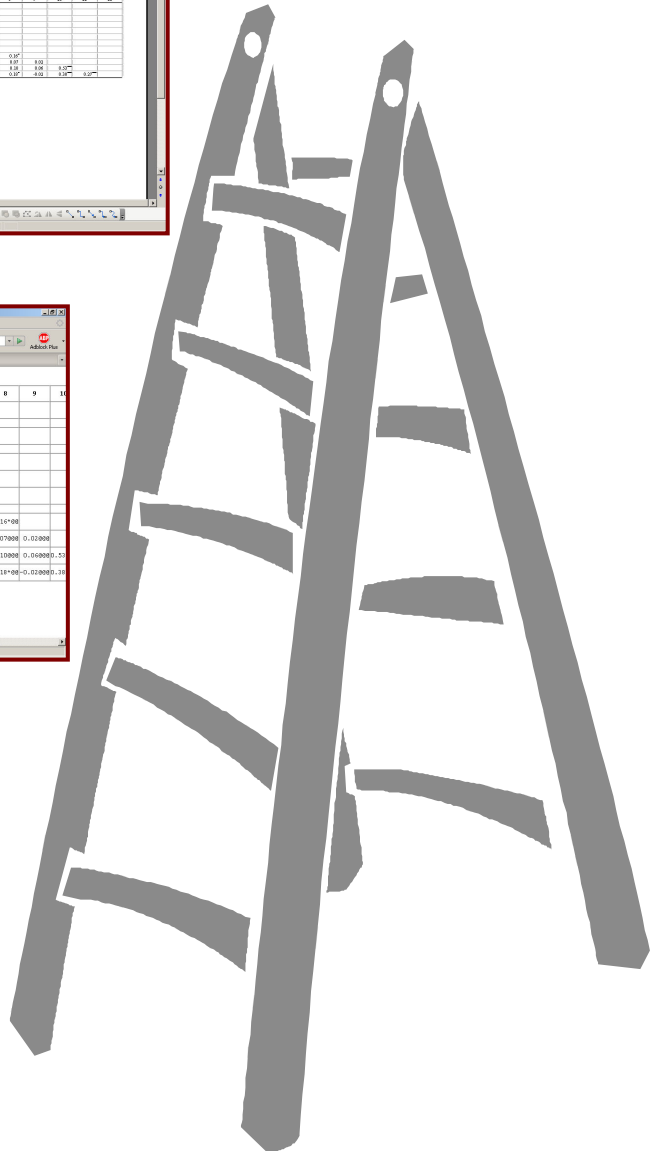
Descriptive Statistics

Variable	Mean	Std. Deviation	N
LOC	1.700	0.700	104
PA	1.700	0.700	104

Correlations (N = 104)

Variable 1	Variable 2	PA	SMC									
LOC	PA	0.20**										
LOC	SMC	0.20**	0.20**									
LOC	SMC_1	0.20**	0.20**	0.20**								
LOC	SMC_2	0.20**	0.20**	0.20**	0.20**							
LOC	SMC_3	0.20**	0.20**	0.20**	0.20**	0.20**						
LOC	SMC_4	0.20**	0.20**	0.20**	0.20**	0.20**	0.20**					
LOC	SMC_5	0.20**	0.20**	0.20**	0.20**	0.20**	0.20**	0.20**				
LOC	SMC_6	0.20**	0.20**	0.20**	0.20**	0.20**	0.20**	0.20**	0.20**			
LOC	SMC_7	0.20**	0.20**	0.20**	0.20**	0.20**	0.20**	0.20**	0.20**	0.20**		
LOC	SMC_8	0.20**	0.20**	0.20**	0.20**	0.20**	0.20**	0.20**	0.20**	0.20**	0.20**	
LOC	SMC_9	0.20**	0.20**	0.20**	0.20**	0.20**	0.20**	0.20**	0.20**	0.20**	0.20**	0.20**

p<.05. *p<.001.



LISGEN Web-Based Table 1 Formatter and Macro

In honor of MGT 698, Spring 2008

The University of Alabama

Casey, Chenwei, David, and Paul

<http://www.cba.ua.edu/~ckacmar/l2/table1.html> is a web-based facility that helps users create and format a table to report variables, means, standard deviations, and correlations from a research study.

The process begins as shown below. The user has copy/pasted the descriptive statistics and correlation matrix from SPSS output into the textboxes on the web page. The user also has defined the number of digits to the right of the decimal place along with construct renaming rules.



In honor of MGT 698, Spring 2008, The University of Alabama: Casey, Chenwei, David, and Paul.

Copy/paste SPSS Descriptive Statistics into this data box	<pre>Descriptive Statistics Mean Std. Deviation N S_OC_1 4.1747 .51805 194 fbal 2.7043 1.76072 194</pre> <input type="button" value="Clear"/>
Copy/paste SPSS Correlation Matrix into this data box	<pre>Correlations (a) S_OC_1 fbal S_PA_1 LMX_1 S_OCBI_1 S_OCBO_1 gender_1 ms_1 child_1 jobyr_1 supyr_1 age_1</pre> <input type="button" value="Clear"/>
{optional}Provide descriptive names for constructs	<pre>WFC, Work Family Conflict IM, Impression Management OCB, Organizational Citizenship Behavior</pre>
Options	Number of significant digits to appear for each value: <input type="text" value="2"/>
<input type="button" value="Generate the Table"/>	

Notes:

- Make sure you generate your SPSS correlation matrix: **in the order you want the variables to appear** within the resulting table.
- Copy and paste the SPSS descriptive statistics and correlation matrix tables into the respective boxes.
- To copy/paste an SPSS table: scroll the SPSS output window to find the table to copy. Click the right mouse button on the table. A popup menu will appear: choose "Copy objects". Click the right mouse button on the table again. The same popup menu will appear but this time choose "Copy". (I know this is weird but this is how it works)
- Click in the appropriate input box below, press CTRL-V or choose Edit/Paste from the menu in your web browser.

Done

Clicking the button at the bottom of the screen causes the software to parse the various inputs and to build an HTML table similar to what would be reported in a research paper. The resulting output appears below. As you can see, the correlations within the table are “marked up” with special characters. Each * represents a level of significance (*=.05, **=0.01, ***=.001) whereas each @ represents a non-breaking space positioned at the end of each value to facilitate the alignment of decimal points.



Table 1. Means, Standard Deviations, and Correlations

Variable	Mean	Std Dev	1	2	3	4	5	6	7	8	9	10	11	12
1. s_oc_1	4.17	0.52												
2. fbal	2.70	1.76	0.07@@@											
3. s_pa_1	3.72	0.77	0.14@@@	0.27***										
4. LMX_1	3.81	0.74	0.20**@	0.43***	0.47***									
5. s_ocbi_1	3.55	0.86	0.25**@	0.25***	0.55***	0.41***								
6. s_ocbo_1	4.45	0.57	0.24**@	0.21**@	0.49***	0.42***	0.44***							
7. gender_1	0.56	0.50	-0.04@@@	0.11@@@	0.01@@@	-0.05@@@	0.08@@@	-0.04@@@						
8. ms_1	1.02	0.59	0.16*@@	0.02@@@	-0.07@@@	-0.06@@@	-0.08@@@	0.12@@@	0.06@@@					
9. child_1	1.01	1.07	-0.13@@@	-0.00@@@	0.09@@@	-0.07@@@	-0.03@@@	0.00@@@	0.08@@@	0.16*@@				
10. jobyr_1	6.98	6.79	0.08@@@	-0.05@@@	0.15*@@	0.03@@@	0.06@@@	-0.03@@@	-0.18*@@	0.07@@@	0.02@@@			
11. supyr_1	3.90	3.76	0.00@@@	0.01@@@	0.03@@@	0.03@@@	-0.01@@@	-0.15*@@	-0.07@@@	0.10@@@	0.06@@@	0.53***		
12. age_1	41.84	10.49	-0.02@@@	-0.12@@@	-0.08@@@	-0.20*@@	-0.07@@@	-0.06@@@	-0.09@@@	0.18*@@	-0.02@@@	0.38***	0.27***	

N = 194

* (p<.05); ** (p<.01); *** (p<.001)

Done

The user now selects everything on the web page by pressing the CTRL and “a” keys at the same time (denoted as CTRL-a). This is followed by pressing the CTRL and “c” keys at the same time to “copy” the selected output into the system’s clipboard.

Table 1. Means, Standard Deviations, and Correlations

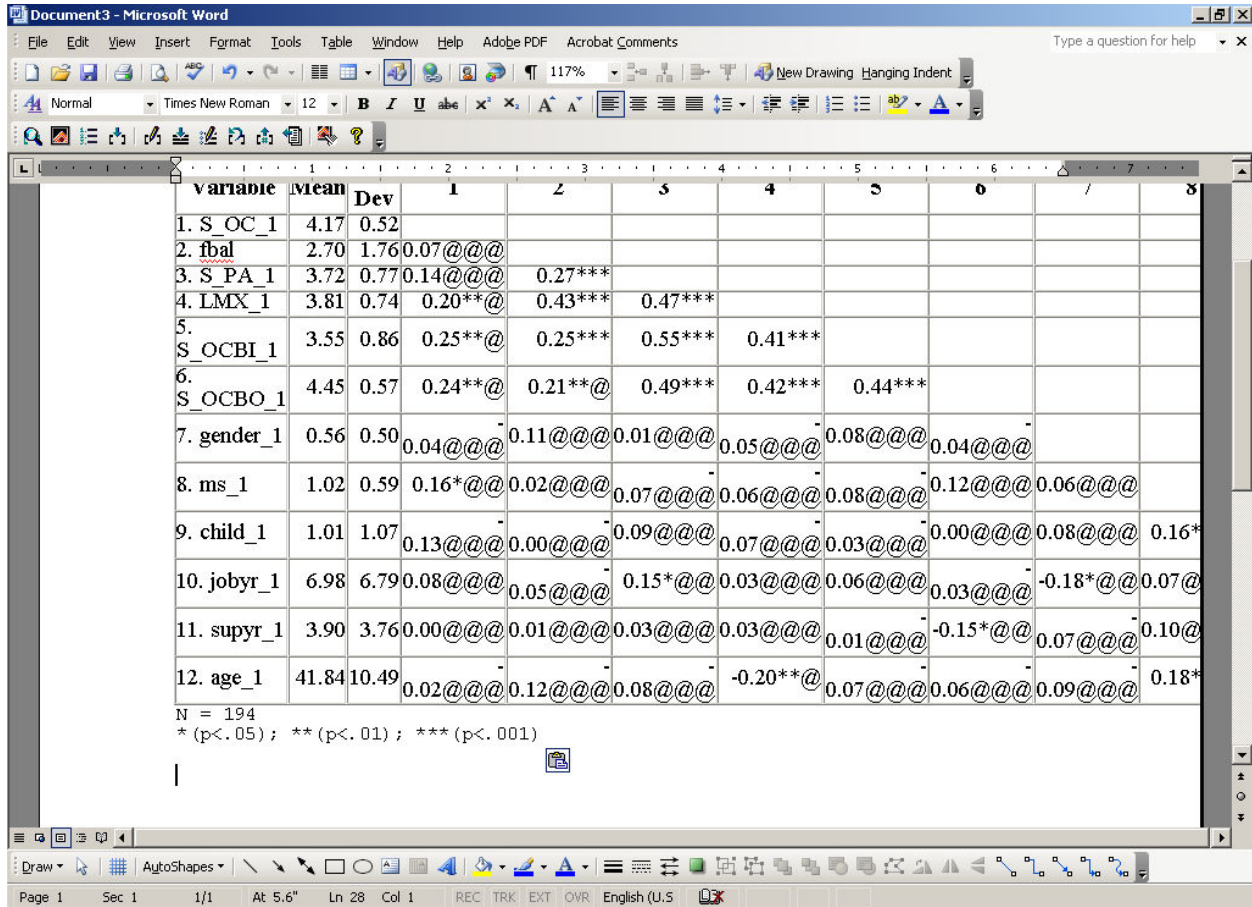
Variable	Mean	Std Dev	1	2	3	4	5	6	7	8	9	10	11	12
1. S OC 1	4.17	0.52												
2. fbal	2.70	1.76	0.07000											
3. S PA 1	3.72	0.77	0.14000	0.27***										
4. LMX 1	3.81	0.74	0.20**0	0.43***	0.47***									
5. S OCBI 1	3.95	0.86	0.25**0	0.25***	0.55***	0.41***								
6. S OCBO 1	4.45	0.57	0.24**0	0.21**0	0.49***	0.42***	0.44***							
7. gender 1	0.56	0.50	-0.04000	0.11000	0.01000	-0.05000	0.08000	-0.04000						
8. ms 1	1.02	0.59	0.16*00	0.02000	-0.07000	-0.06000	-0.08000	0.12000	0.06000					
9. child 1	1.01	1.07	-0.13000	-0.00000	0.09000	-0.07000	-0.03000	0.00000	0.08000	0.16*00				
10. jobyr 1	6.98	6.79	0.08000	-0.05000	0.15*00	0.03000	0.06000	-0.03000	-0.18*00	0.07000	0.02000			
11. supyr 1	3.90	3.76	0.00000	0.01000	0.03000	0.03000	-0.01000	-0.15*00	-0.07000	0.10000	0.06000	0.53***		
12. age 1	41.84	10.49	-0.02000	-0.12000	-0.08000	-0.20**0	-0.07000	-0.06000	-0.09000	0.18*00	-0.02000	0.38***	0.27***	

N = 194
 * (p<.05); ** (p<.01); *** (p<.001)

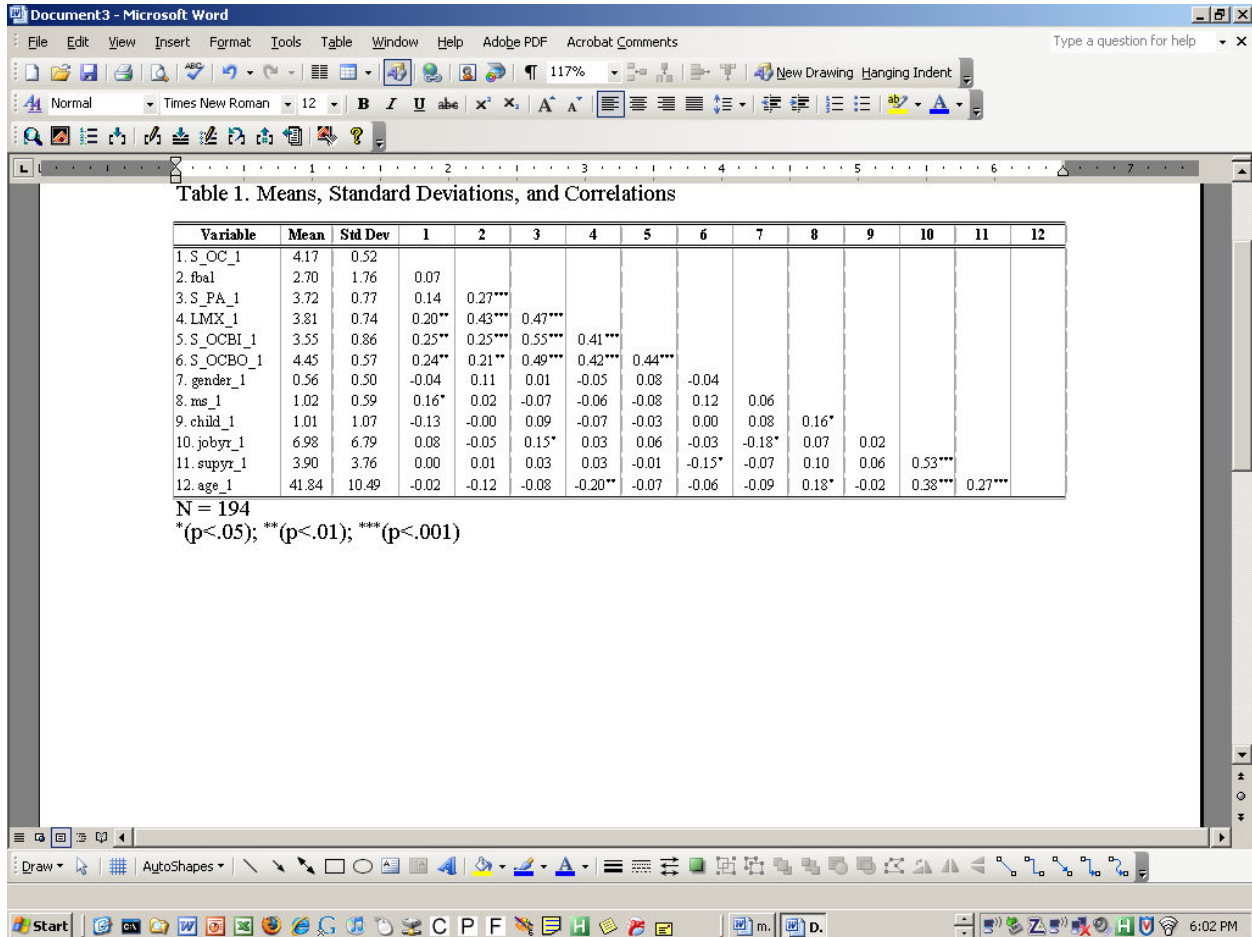
Done

The user now invokes the Microsoft Word application. It is suggested that the user sets the page layout to landscape to provide more room for the facility to reformat the table.

The user “pastes” the clipboard contents into the Microsoft Word document by pressing the CTRL-v key combination. The resulting document appears below. Although this document may look unusual and unformatted, one more step will help reformat this content into a more presentable table.

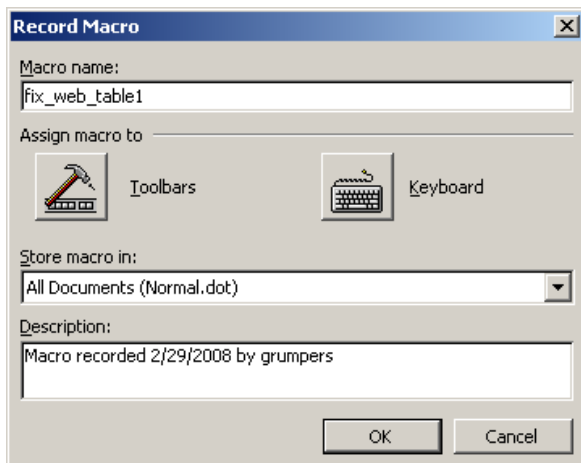


The user now invokes a Microsoft Word “macro” that has been created specifically for this task. The macro is software that will automatically carry out tasks to reformat the table into a more presentable format. During the execution of the macro the Microsoft Word document will dynamically change as the macro carries out its task. Upon completion, the macro will produce reformatted output that is closer to being in manuscript-ready format. An example of such output is shown below.

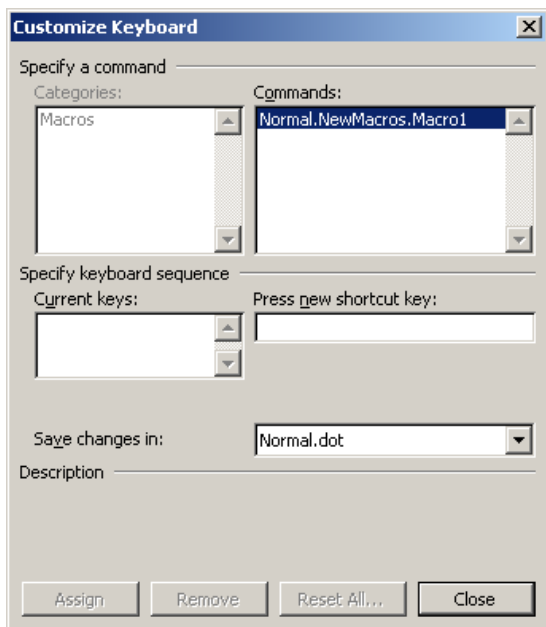


Review. There are two parts to this facility: (1) the web based component that parses SPSS outputs into a draft version of the table (available from <http://www.cba.ua.edu/~ckacmar/12>), (2) a Microsoft Word macro that reformats the web-generated table into a more complete version.

To create a MS Word macro you must invoke the “Tools ■ Macro ■ Record New Macro” menu item. Doing so causes a dialog box to appear as shown below. Enter a meaningful name for the macro, an example is shown (NOTE: do not use spaces or special characters (!@#\$\$% etc) in the macro name):

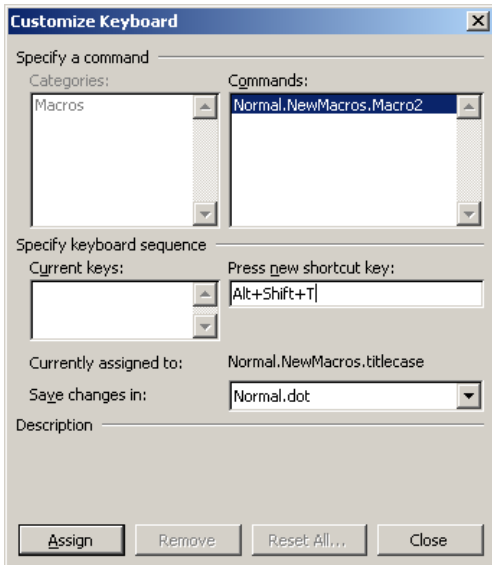


Click the button labeled “Keyboard”. Another dialog box will appear:

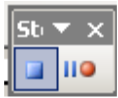


At this point you need to think of a unique sequence/combination of keys that you will always remember. These key presses will be used *from now on to invoke this macro*. Suppose we choose the key combination ALT-SHIFT-T (ALT key and SHIFT key and T key are pressed at the same time).

As you can see, the system has recognized the three-key combination we have entered and will now assign that combination to the new macro. Click the “Assign” button in the lower left of the dialog box to continue.

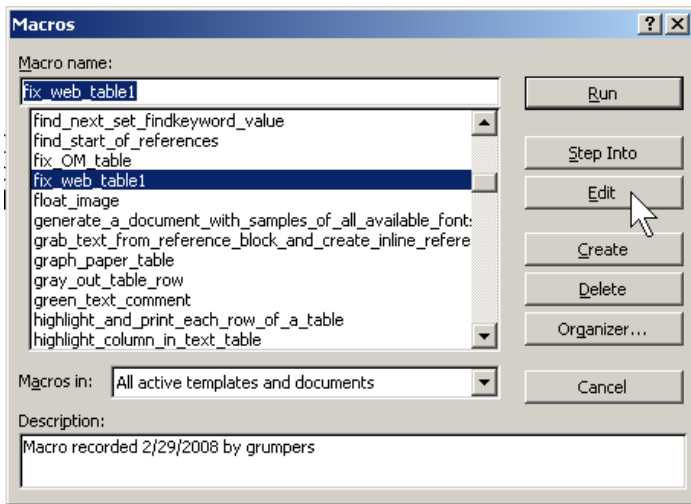


Look carefully around your entire display to find a small screen that looks like this:

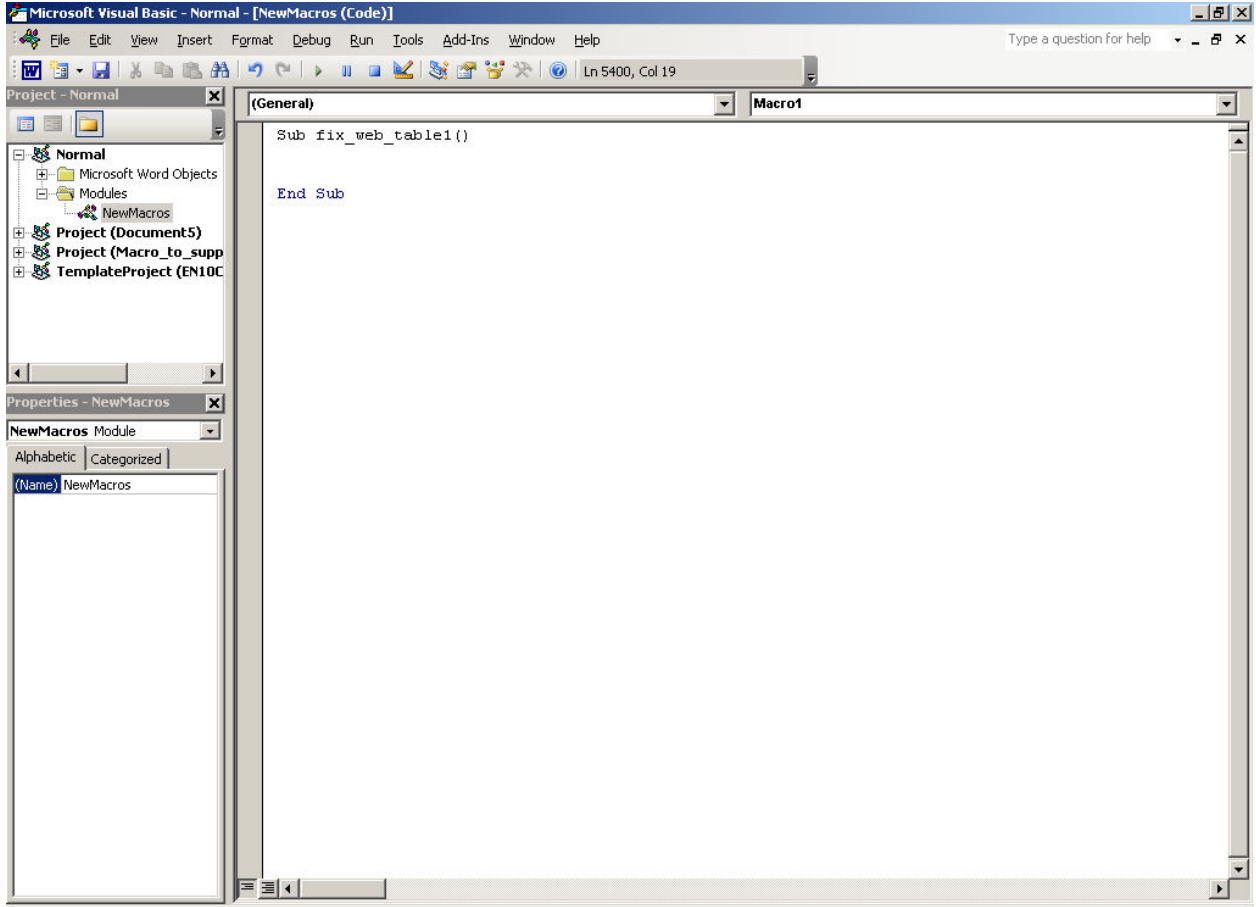


Click the blue button on the left side of this panel to stop recording the macro.

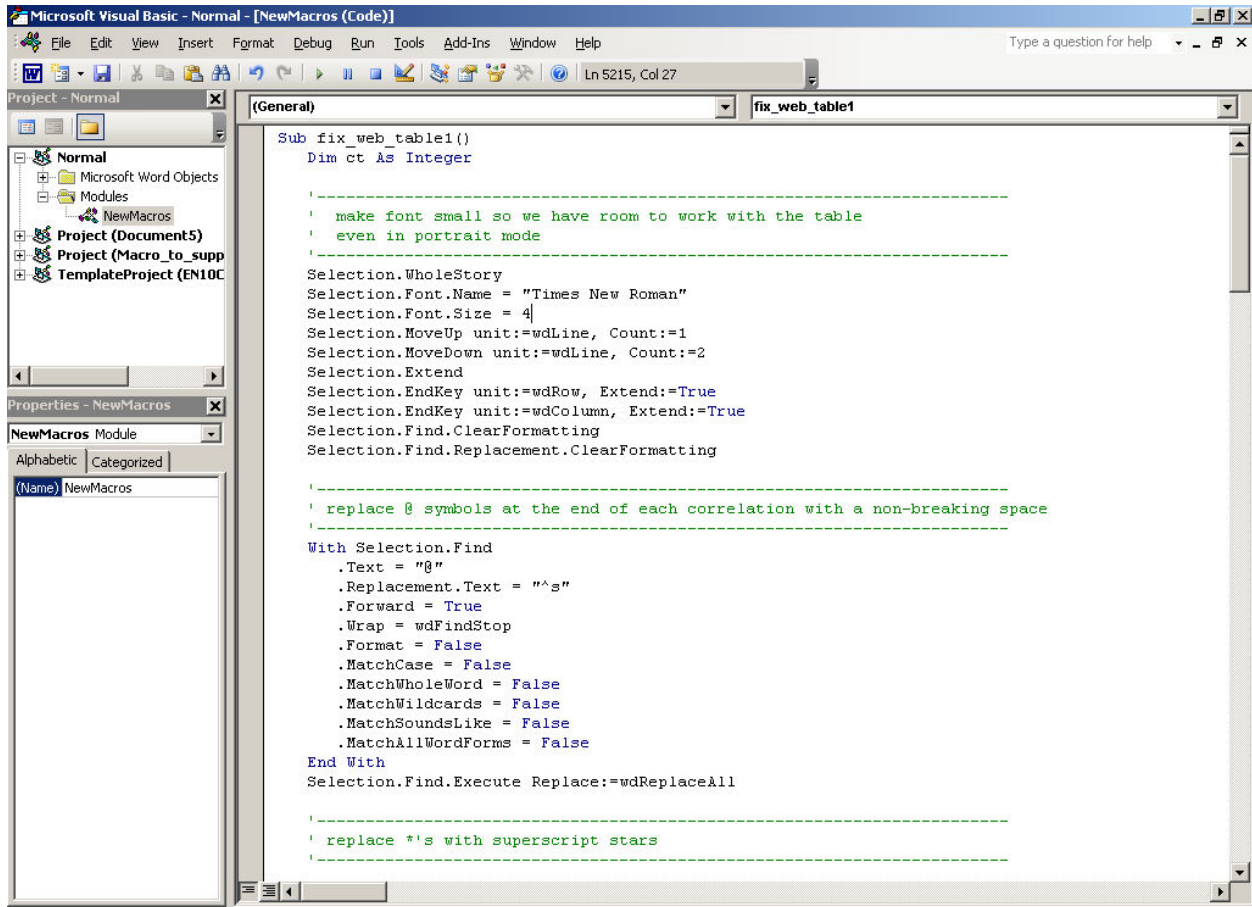
Press the ALT and F8 keys simultaneously to display the macro list on your Microsoft Word installation. Scroll the list to find the name of the macro you just created. Make sure the name of the macro is highlighted. Click the EDIT button on the right side of the screen.



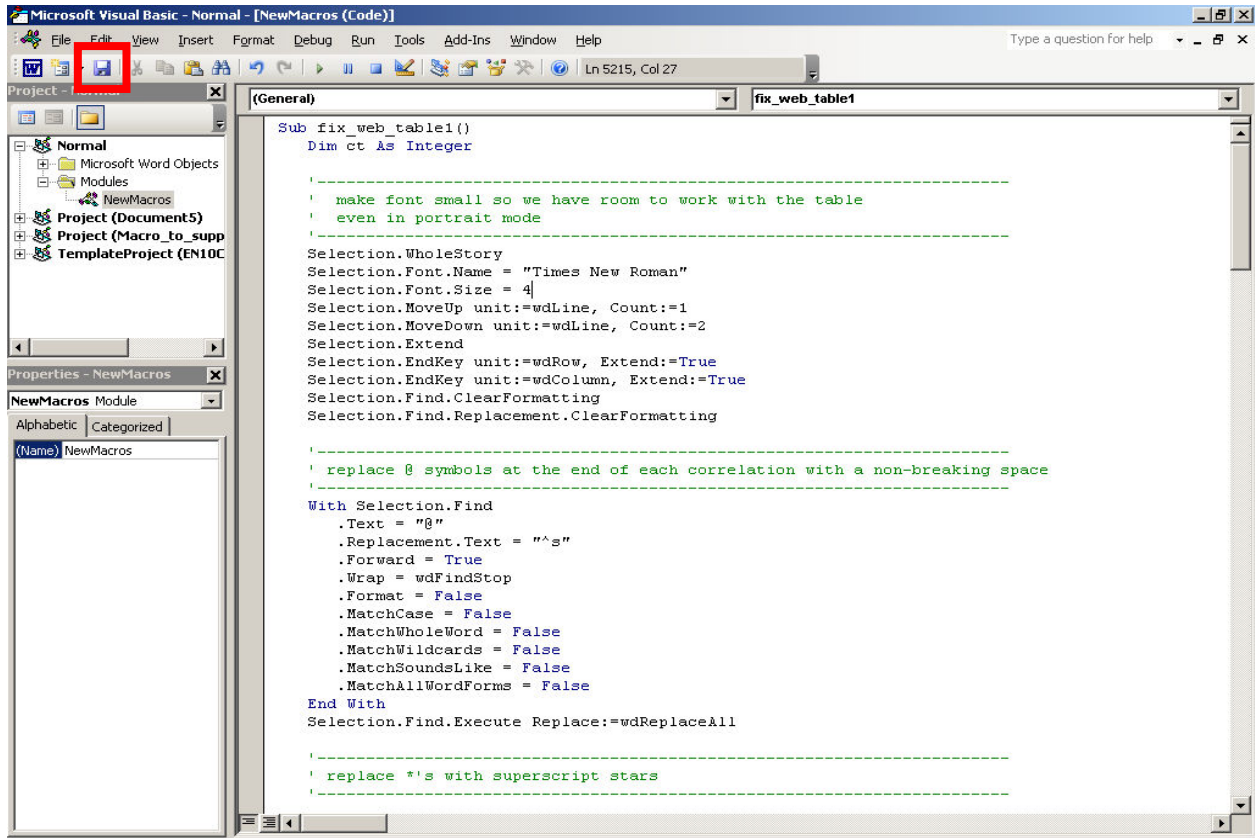
A screen will now appear that looks something like the following:



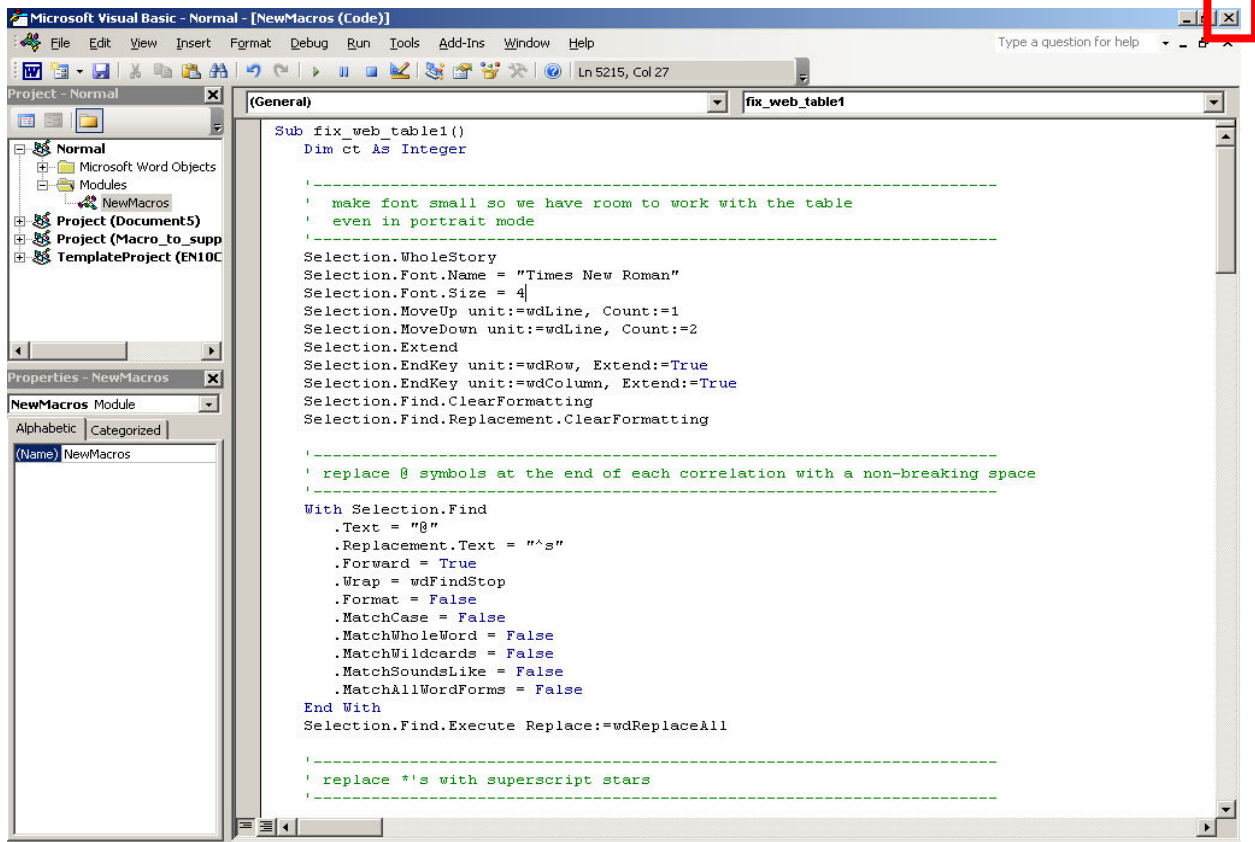
Copy/paste the macro code (at the end of this document) BETWEEN the Sub and EndSub statements of the macro. Your page will now look something like this:



Locate the diskette looking icon in the upper left of this window. Click it to update and save the macro.



Close the window by clicking the window-close icon in the upper right.



You are now ready to run your macro.

Below is a summary of the steps needed to generate a means, standard deviations, and correlations table for a research paper:

1. open a new, empty MS Word document
2. go to the table1 web page: <http://www.cba.ua.edu/~ckacmar/l2/table1.html>
3. click both CLEAR buttons to remove whatever content are in the input boxes
4. set the number of digits to the right of the decimal point
5. add new entries to rename the constructs in your SPSS correlation table
6. copy/paste the descriptive statistics content from SPSS into the first input box
7. copy/paste the entire correlation matrix from SPSS into the second input box
8. click the “Generate the Table” button at the bottom of the window
9. click CTRL-a to select all content generated by this facility
10. click CTRL-c to copy the content into the system clipboard
11. toggle over to the MS Word document
12. click CTRL-v to paste the clipboard’s content into the MS Word document
13. invoke the macro

Macro code:

```
` Installation:
` - open Microsoft Word
` - click Tools --> Macro --> Record New Macro
` - enter a meaningful name for the macro, something like
  ` table1_formatter
  ` would be good. Use letters, numbers, or the underscore only.
  ` Other special characters will cause an error.
` - click the KEYBOARD button
` - in the box labeled "Press New Shortcut Key:"
  ` - press AND HOLD down the CTRL key
  ` - press the t key
  ` - press the 1 key
  ` you should now see CTRL+T,1 inside the textbox
` - press the button labeled ASSIGN on the lower left
` - press the button labeled CLOSE on the lower right
` A very small dialog box will now appear. It's so small
  ` you may have to scan your screen carefully to see it.
  ` Within that box you will see a small blue square.
  ` Click the blue square.
`
` - click Tools --> Macro --> Macros
` - scroll up/down to find the macro you just created
` - click ONCE on the name of that macro
` - on the right side of this dialog box click the EDIT button
` - you'll now see statements that look something like this:
  ` Sub table1_formatter()
  `
  ` table_formatter Macro
  ` Macro Recorded mm/dd/yyyy by (your name)
  `
  ` End Sub
`
` copy and paste all lines of the macro below and paste
  ` the lines where indicated below:
  `
  ` Sub table1_formatter()
  `
  ` table_formatter Macro
  ` Macro Recorded mm/dd/yyyy by (your name)
  `
  ` <<<<< paste the lines here
  `
  ` End Sub
`
` Now, whenever you want to run the macro simply
  ` - press and HOLD down the CTRL key
  ` - press the t key
  ` - press the 1 key
`

-----
' table1_formatter macro
'
' this macro will reformat generated table 1's from the lisen
' website. The macro will reformat tables by changing the font,
' aligning columns, bolding the first line of the table, and
' adjusting the font on the text before and after the table.
-----
Dim ct As Integer
-----
' change page to landscape mode so we have more room to fit the columns
-----
With ActiveDocument.PageSetup
  .LineNumbering.Active = False
  .Orientation = wdOrientLandscape
  .PageWidth = InchesToPoints(11)
  .PageHeight = InchesToPoints(8.5)
End With

-----
' fit the page to the width of the window to enhance visibility
-----
ActiveWindow.ActivePane.View.Zoom.PageFit = wdPageFitBestFit

-----
' make font small so we have room to work with the table
' even in portrait mode
-----
Selection.WholeStory
Selection.Font.Name = "Times New Roman"
Selection.Font.Size = 4
Selection.MoveUp unit:=wdLine, Count:=1
Selection.MoveDown unit:=wdLine, Count:=2
Selection.Extend
Selection.EndKey unit:=wdRow, Extend:=True
Selection.EndKey unit:=wdColumn, Extend:=True
Selection.Find.ClearFormatting
Selection.Find.Replacement.ClearFormatting

-----
' replace @ symbols at the end of each correlation with a non-breaking space
```

```

-----
With Selection.Find
    .Text = "g"
    .Replacement.Text = "^s"
    .Forward = True
    .Wrap = wdFindStop
    .Format = False
    .MatchCase = False
    .MatchWholeWord = False
    .MatchWildcards = False
    .MatchSoundsLike = False
    .MatchAllWordForms = False
End With
Selection.Find.Execute Replace:=wdReplaceAll

-----
' replace *'s with superscript stars
-----
Selection.Find.ClearFormatting
Selection.Find.Replacement.ClearFormatting
With Selection.Find
    .Text = "*"
    .Forward = True
    .Wrap = wdFindStop
    .Format = False
    .MatchCase = False
    .MatchWholeWord = False
    .MatchWildcards = False
    .MatchSoundsLike = False
    .MatchAllWordForms = False
End With
While Selection.Find.Execute = True
    Selection.Font.Superscript = wdToggle
    Selection.MoveRight unit:=wdCharacter

    Selection.Find.ClearFormatting
    Selection.Find.Replacement.ClearFormatting
    With Selection.Find
        .Text = "*"
        .Forward = True
        .Wrap = wdFindStop
        .Format = False
        .MatchCase = False
        .MatchWholeWord = False
        .MatchWildcards = False
        .MatchSoundsLike = False
        .MatchAllWordForms = False
    End With
Wend

-----
' turn off all lines
-----
Selection.HomeKey unit:=wdLine
ActiveDocument.Tables(1).Select
With Selection.Tables(1)
    .Borders(wdBorderLeft).LineStyle = wdLineStyleNone
    .Borders(wdBorderRight).LineStyle = wdLineStyleNone
    .Borders(wdBorderTop).LineStyle = wdLineStyleNone
    .Borders(wdBorderBottom).LineStyle = wdLineStyleNone
    .Borders(wdBorderHorizontal).LineStyle = wdLineStyleNone
    .Borders(wdBorderVertical).LineStyle = wdLineStyleNone
    .Borders.Shadow = False
End With
With Options
    .DefaultBorderLineStyle = wdLineStyleOutset
    .DefaultBorderLineWidth = wdLineWidth075pt
    .DefaultBorderColor = wdColorAutomatic
End With

-----
' adjust the cell spacing to make table print prettier
-----
ActiveDocument.Tables(1).Select
With Selection.Tables(1)
    .TopPadding = InchesToPoints(0.02)
    .BottomPadding = InchesToPoints(0.02)
    .LeftPadding = InchesToPoints(0.02)
    .RightPadding = InchesToPoints(0.02)
    .Spacing = 0
    .AllowPageBreaks = False
    .AllowAutoFit = False
End With

-----
' select the whole table and fit it to the width of the page
-----
Selection.HomeKey unit:=wdRow
Selection.HomeKey unit:=wdColumn
Selection.Tables(1).AutoFitBehavior (wdAutoFitWindow)

-----
' select the entire first row and change the upper and lower
' lines to bold
-----
Selection.Tables(1).rows(1).Borders(wdBorderTop).LineStyle = wdLineStyleDouble
Selection.Tables(1).rows(1).Borders(wdBorderBottom).LineStyle = wdLineStyleDouble

-----
' now change the border on the last line of the table so that
' the bottom line is bold
-----
Selection.Tables(1).rows(Selection.Tables(1).rows.Count).Borders(wdBorderBottom).LineStyle = wdLineStyleDouble

-----
' move past the means and stdv's column to the first column of correlations
-----
Selection.HomeKey unit:=wdLine
Selection.HomeKey unit:=wdColumn
Selection.EndKey unit:=wdLine
Selection.MoveRight unit:=wdCharacter, Count:=1
Selection.EndKey unit:=wdLine
Selection.MoveRight unit:=wdCharacter, Count:=1
Selection.EndKey unit:=wdLine

```

```

Selection.MoveRight unit:=wdCharacter, Count:=1
Selection.EndKey unit:=wdRow
Selection.HomeKey unit:=wdRow
Selection.EndKey unit:=wdLine
Selection.MoveRight unit:=wdCharacter, Count:=1
Selection.EndKey unit:=wdLine
Selection.MoveRight unit:=wdCharacter, Count:=1
Selection.EndKey unit:=wdLine
Selection.MoveRight unit:=wdCharacter, Count:=1

'-----
' select all correlations column then set them to all be the same width
'-----
Selection.Extend
Selection.EndKey unit:=wdRow, Extend:=True
Selection.EndKey unit:=wdColumn, Extend:=True
Selection.Cells.DistributeWidth

'-----
' now center the values within the means and stdv's columns
'-----
Selection.HomeKey unit:=wdLine
Selection.HomeKey unit:=wdRow
Selection.EndKey unit:=wdLine
Selection.MoveRight unit:=wdCharacter, Count:=1
Selection.Extend
Selection.EndKey unit:=wdLine
Selection.MoveRight unit:=wdCharacter, Count:=1
Selection.EndKey unit:=wdColumn, Extend:=True
Selection.ParagraphFormat.Alignment = wdAlignParagraphCenter

'-----
' increase the font size to something more reasonable
'-----
Selection.HomeKey unit:=wdLine
Selection.HomeKey unit:=wdRow
Selection.WholeStory
Selection.Font.Size = 8

'-----
' change the font size for the table name and title to TNR 12
'-----
Selection.HomeKey unit:=wdLine
Selection.EndKey unit:=wdLine, Extend:=wdExtend
Selection.MoveLeft unit:=wdCharacter, Count:=1, Extend:=wdExtend
Selection.Font.Size = 12

'-----
' set the font size for the sample size at the bottom of the table
' and the pvalue cutoffs to TNR 12
'-----
Selection.HomeKey unit:=wdLine
Selection.EndKey unit:=wdStory
Selection.MoveUp unit:=wdLine, Count:=2, Extend:=wdExtend
Selection.Font.Size = 12
Selection.HomeKey unit:=wdStory

```