

# A boring (academic) title or a clever title?

## A secondary title

YOUR NAME HERE      *Washington State University*

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In this article we compare the *empirical characteristic function* (Tukey 1977; Becker et al. 1988) to a *moment-generating-functional form* to compute the proportion of hypotheses  $m$  that are rejected under the null hypothesis.

Here is a second paragraph of the abstract (if necessary), and with the pipe notation it doesn't break. Notice it still needs to be indented.

Generally, we write this abstract last. Often it is called the executive summary. It should succinctly summarize the entire document. You can include references such as this one to the Appendices section ?? if necessary.

**Keywords:** multiple comparisons to control; multivariate chi-square distribution; nonlinear growth curves; Richard's curve; simulated critical points

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November 08, 2020

```
library(devtools);          # required for source_url
library(dplyr)

path.humanVerseWSU = "https://raw.githubusercontent.com/MonteShaffer/humanVerseWSU/"
source_url( paste0(path.humanVerseWSU,"master/misc/functions-project-measure.R") );

## Warning: package 'Hmisc' was built under R version 4.0.3

path.project = "C:/Users/Dorbs of Doom/_git_/WSU_STATS419_FALL2020/project-measure/";
path.tables = paste0(path.project,"tables/");
createDirRecursive(path.tables);

file.correlation = paste0(path.tables,"my-correlation-table.tex");

path.project = "C:/_git_/WSU_STATS419_FALL2020/project-measure/";

path.github = "https://raw.githubusercontent.com/kat-rivas/WSU_STATS419_FALL2020/";
source_url( paste0(path.github,"master/functions/functions-project-measure.R") );
measure = readRDS("C:/Users/Dorbs of Doom/Documents/WSU/Fall 2020/STAT 419 Intro to Multivariate/final.

measure.df = prepareMeasureData(measure)

measure.df2 = select(measure.df, head.to.height, ethnicity.groups, age, my.gender)
myData = as.matrix(measure.df2); # numeric values only, only what will appear in table

# https://www.overleaf.com/read/srzhrcryjpwu
# keepaspectratio of include graphics
# could scale \input if still too big ...
# https://tex.stackexchange.com/questions/13460/scalebox-knowing-how-much-it-scales#13487
```

```
buildLatexCorrelationTable(myData,
  rotateTable = FALSE,
  width.table = 0.95, # best for given data ... 0.95 when rotateTable = FALSE
                    # 0.60 when rotateTable = TRUE
  myFile = file.correlation,
  myNames = c("Head to Height", "Ethnicity", "Age", "Gender" ) );

Sys.sleep(2); # in case Knit-PDF doesn't like that I just created the file...
```

Table 1: Descriptive Statistics and Correlation Analysis

	M	SD	1	2	3
1 Head to Height	6.7	.87	1		
2 Ethnicity	1.5	1.02	-.16*	1	
3 Age	34.4	17.68	-.02	-.12 <sup>†</sup>	1
4 Gender	1.5	.51	.07	-.01	-.08

**Notes:** Pearson pairwise correlations are reported;  
a two-side test was performed to report correlation significance.

<sup>†</sup> $p < .10$      $*p < .05$      $**p < .01$      $***p < .001$

```
# build a second table, with more data ...

file.correlation = paste0(path.tables,"tree-correlation-table2.tex");

myData = as.matrix(trees); # numeric values only, only what will appear in table

myData = cbind(myData,myData);
# https://www.overleaf.com/read/srzhrcryjpwn
# keepaspectratio of include graphics
# could scale \input if still too big ...
# https://tex.stackexchange.com/questions/13460/scalebox-knowing-how-much-it-scales#13487
buildLatexCorrelationTable(myData,
  rotateTable = TRUE,
  width.table = 0.95,
  myFile = file.correlation,
  myNames = c("Diameter (in)", "Height (ft)", "Volume (ft3)", "Diameter (in)", "Height (ft)", "Volume (ft3)"));

Sys.sleep(2); # in case Knit-PDF doesn't like that I just created the file...
```

Table 2: Descriptive Statistics and Correlation Analysis

	M	SD	1	2	3	4	5
1 Diameter (in)	13.2	3.14	1				
2 Height (ft)	76.0	6.37	.52**	1			
3 Volume (ft <sup>3</sup> )	30.2	16.44	.97***	.60***	1		
4 Diameter (in)	13.2	3.14	1.00***	.52**	.97***	1	
5 Height (ft)	76.0	6.37	.52**	1.00***	.60***	.52**	1
6 Volume (ft <sup>3</sup> )	30.2	16.44	.97***	.60***	1.00***	.97***	.60***

**Notes:** Pearson pairwise correlations are reported;  
a two-side test was performed to report correlation significance.

<sup>†</sup> $p < .10$    <sup>\*</sup> $p < .05$    <sup>\*\*</sup> $p < .01$    <sup>\*\*\*</sup> $p < .001$

## ENDNOTES

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## REFERENCES

- Becker, Richard A, John M Chambers, Allan R & Brooks.  
Wilks. 1988. *The New S Language*. Wadsworth  
Tukey, John W. 1977. *Exploratory data analysis*. 1st  
ed. Reading, MA.

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