

A boring (academic) title or a clever title?

A secondary title

YOUR NAME HERE *Washington State University*

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

November 09, 2020

```
library(devtools);          # required for source_url
path.humanVerseWSU = "https://raw.githubusercontent.com/MonteShaffer/humanVerseWSU/"
source_url( paste0(path.humanVerseWSU,"master/misc/functions-project-measure.R") );
path.project = "C:/_git_/WSU_STATS419_FALL2020/project-measure/";
path.tables = paste0(path.project,"tables/");
createDirRecursive(path.tables);
```

```
file.correlation = paste0(path.tables,"correlation-table.tex");
final.measure <- readRDS(paste0(path.project,'final.measure.rds'))
myData = as.matrix(final.measure[,c(3:7,20:28)]); # numeric values only, only what will appear in tabl
# 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 = TRUE,
  width.table = 0.60, # best for given data ... 0.95 when rotateTable = FALSE
                    # 0.60 when rotateTable = TRUE
  myFile = file.correlation,
  myNames = colnames(myData))
Sys.sleep(2); # in case Knit-PDF doesn't like that I just created the file...
```

```
# 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
# keep aspect ratio 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 (ft$^3$)", "Diameter (in)", "Height (ft)", "Volume (ft$^3$)"),
  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	4	5	6	7
1 height	167.3	15.24	1						
2 head.height	22.2	2.69	.30***	1					
3 head.circumference	56.1	4.66	.30***	.23***	1				
4 arm.span	167.4	21.54	.72***	.10	.25***	1			
5 floor.navel	101.6	12.33	.76***	.33***	.25***	.42***	1		
6 hand.length	19.5	16.39	.15*	-.03	.06	.12 [†]	.08	1	
7 hand.width	19.6	2.99	.54***	.13*	.29***	.69***	.46***	.07	1
8 hand.elbow	42.4	4.72	.71***	.22***	.14*	.61***	.62***	.10	.49*
9 elbow.armpit	26.7	6.48	.41***	.06	-.16*	.30***	.29***	.05	.12 [†]
10 arm.reach	191.7	49.23	.28***	.07	.08	.28***	-.07	.09	.41*
11 foot.length	24.8	2.79	.70***	.27***	.21**	.61***	.54***	.09	.55*
12 floor.kneepit	45.1	5.67	.66***	.26***	.21**	.43***	.54***	.09	.27*
13 floor.hip	95.2	9.49	.71***	.21**	.22**	.51***	.80***	.11 [†]	.51*
14 floor.armpit	130.3	12.38	.83***	.19**	.27***	.60***	.49***	.15*	.54*

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

[†] $p < .10$ * $p < .05$ ** $p < .01$ *** $p < .001$

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 ³)	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 ³)	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.

[†] $p < .10$ * $p < .05$ ** $p < .01$ *** $p < .001$

ENDNOTES

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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