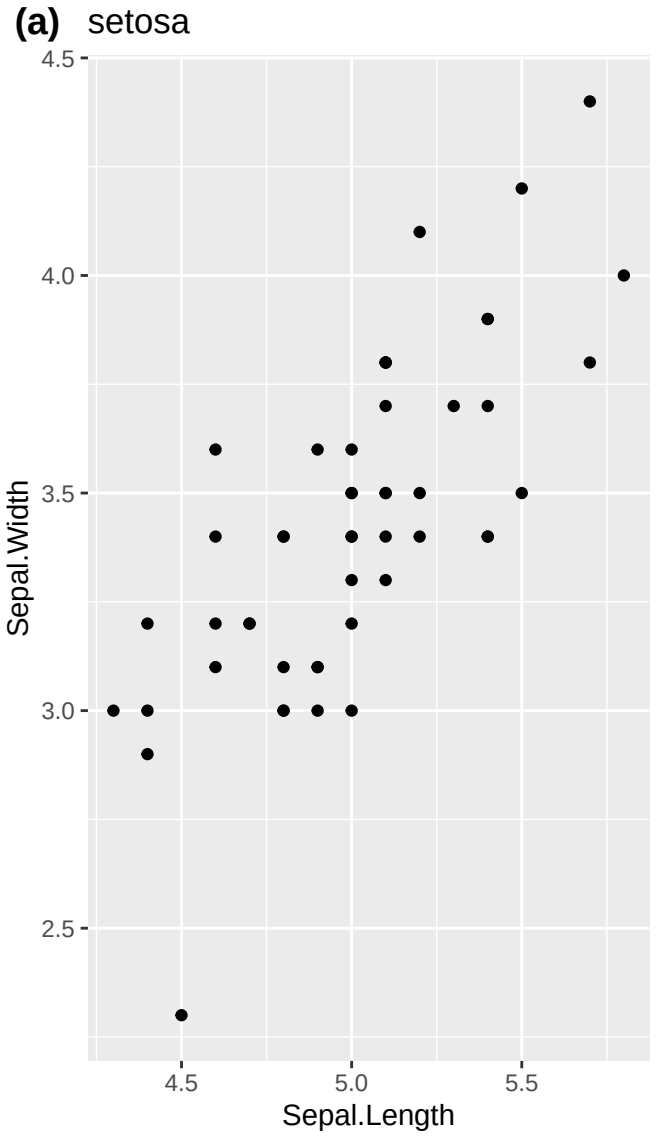
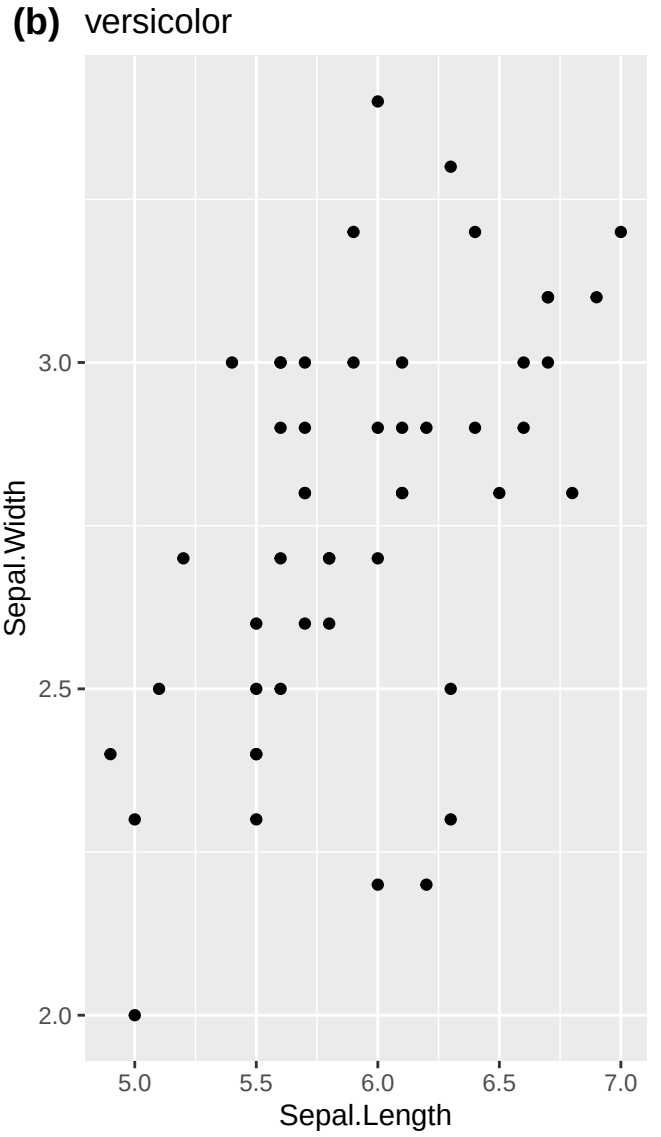
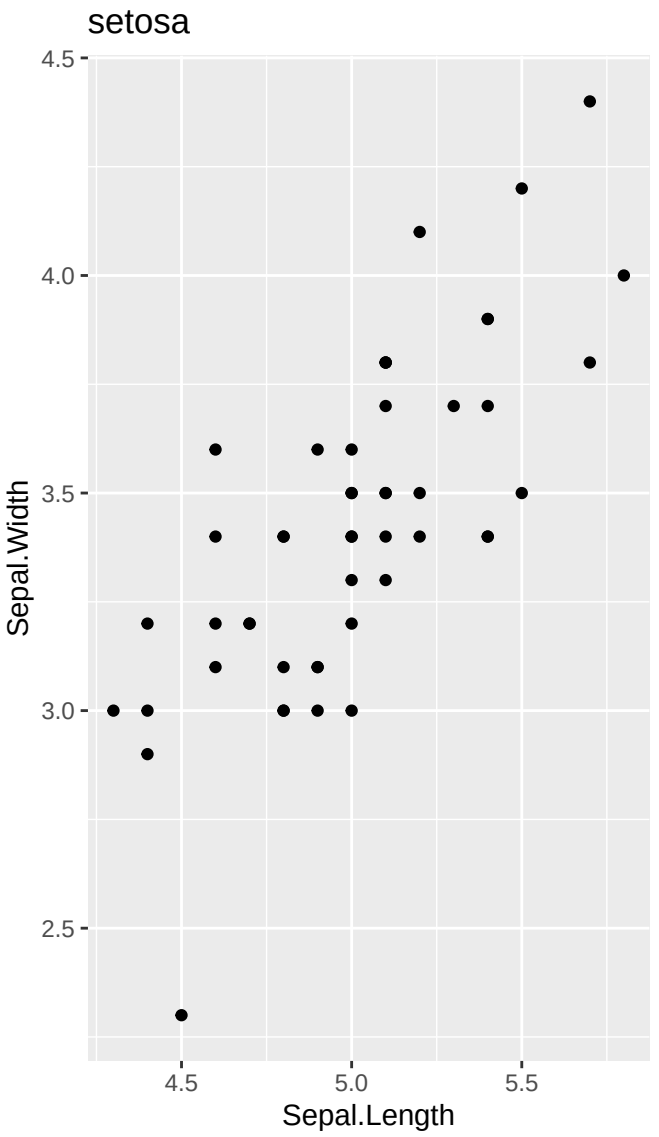
Dataset: Iris Flower dataset

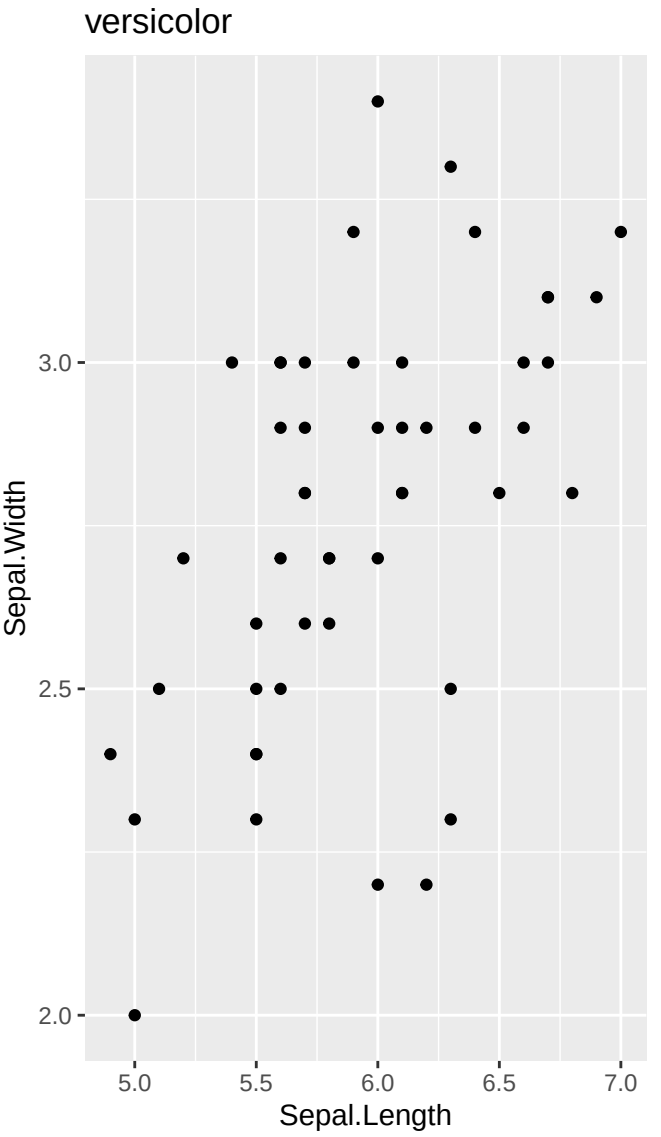




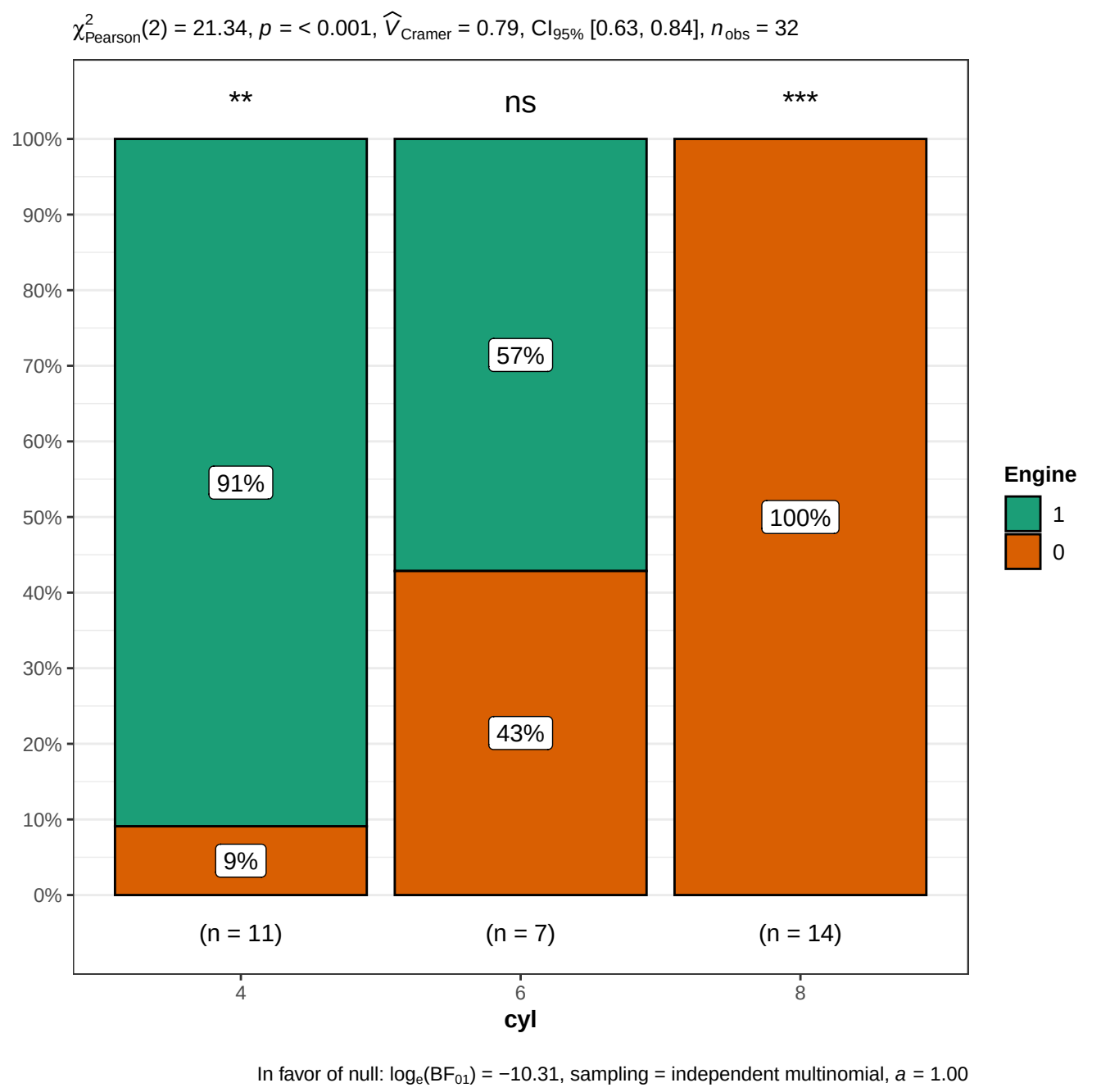
Note: Only two species of flower are displayed

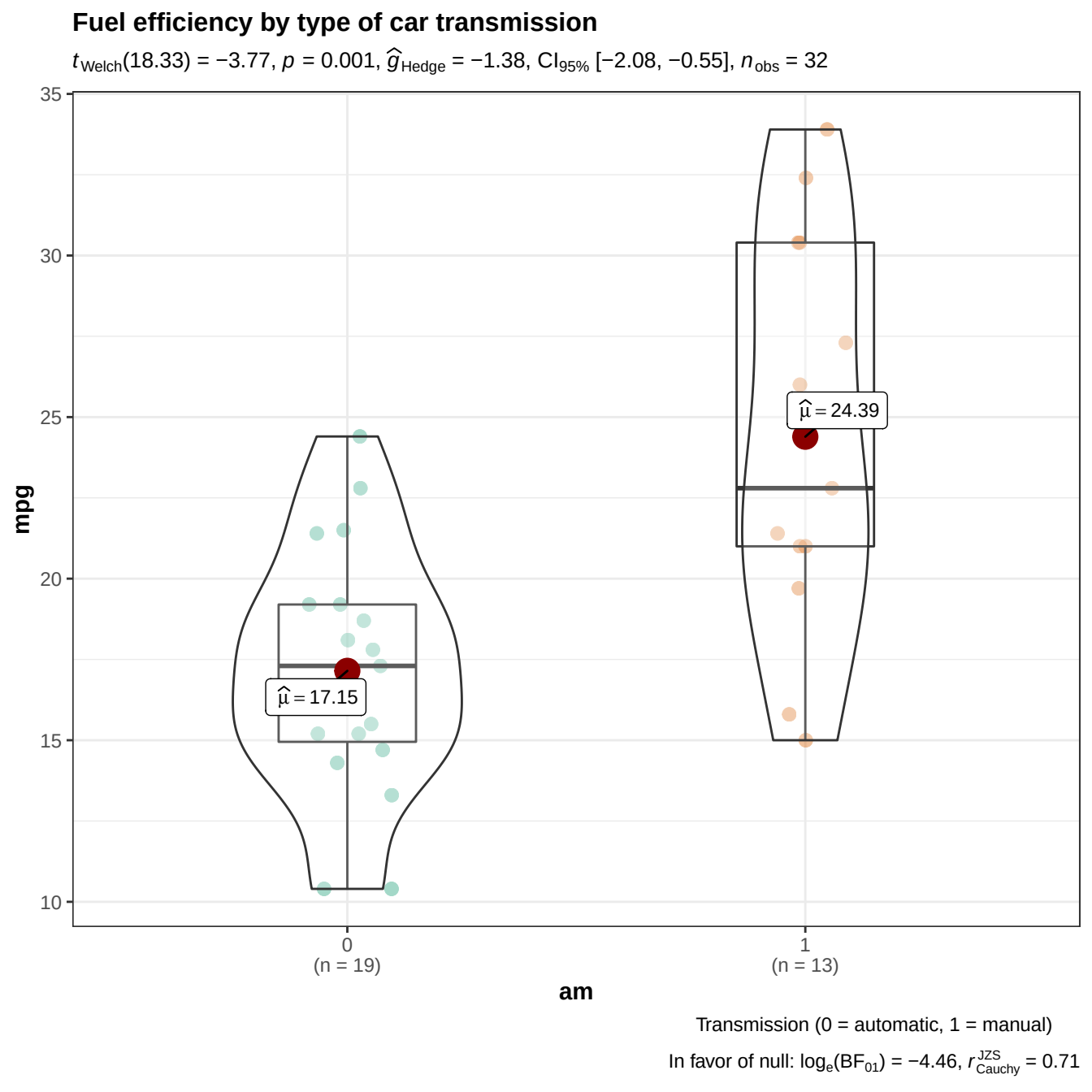
Dataset: Iris Flower dataset

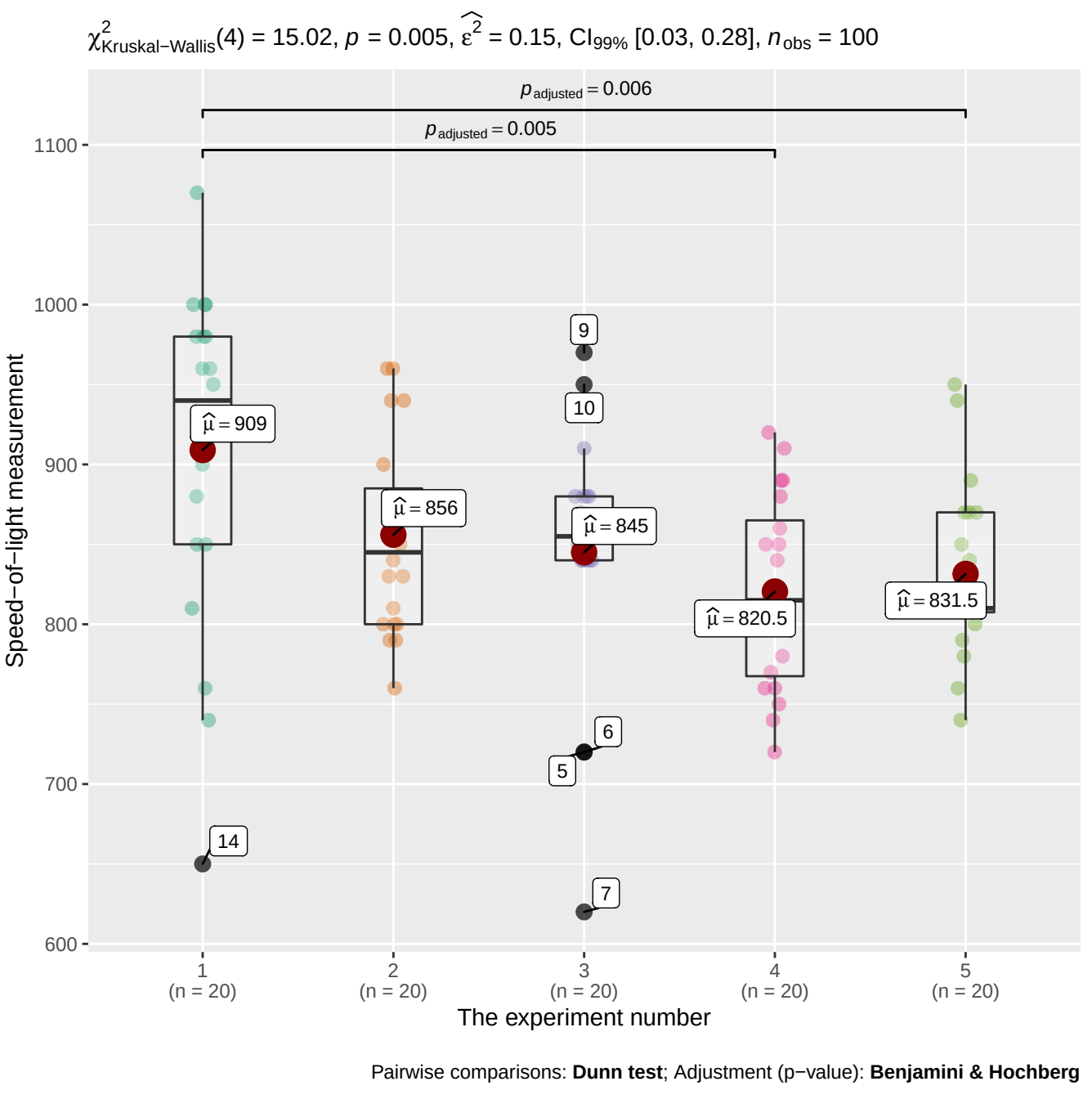


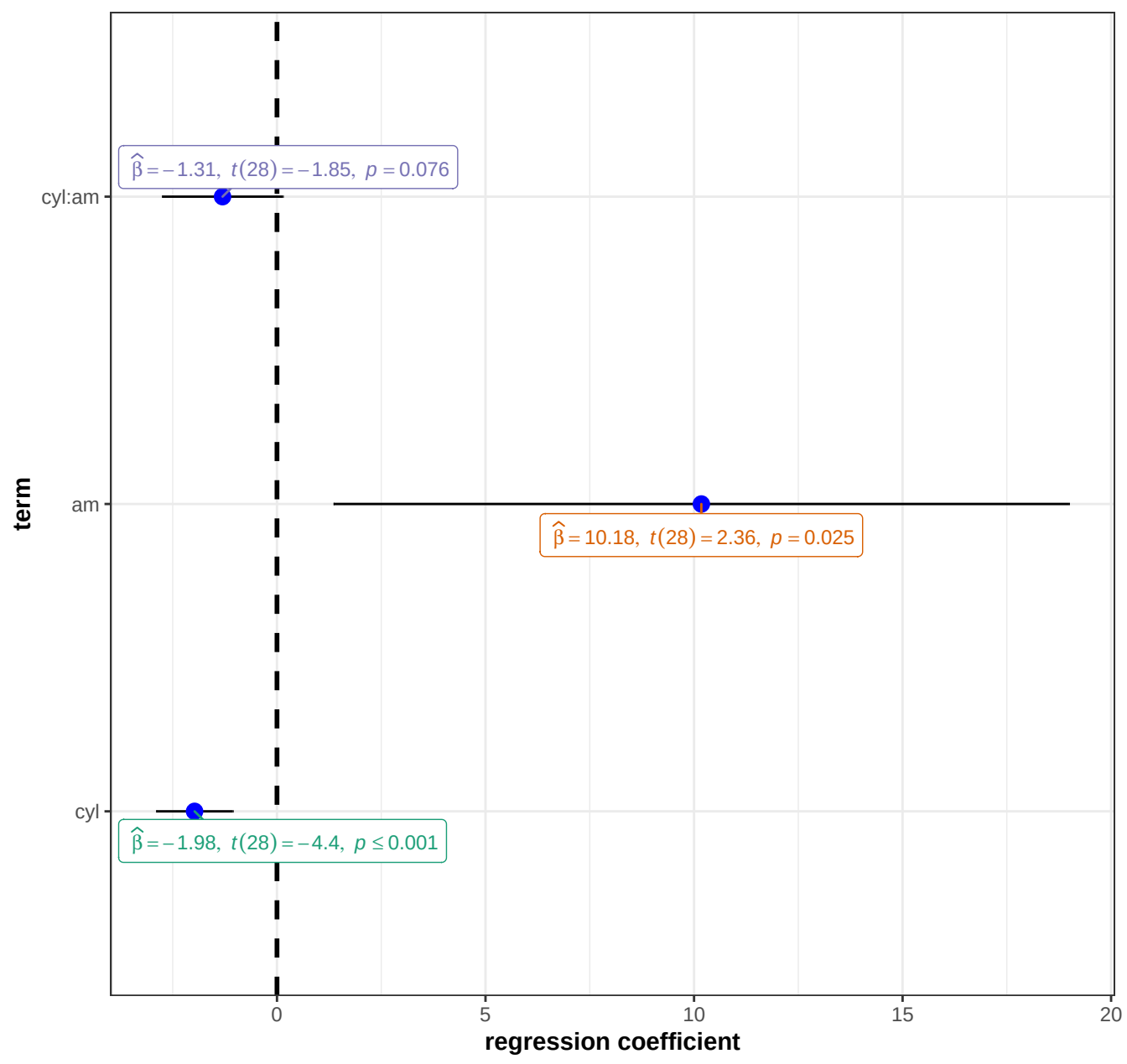


Note: Only two species of flower are displayed

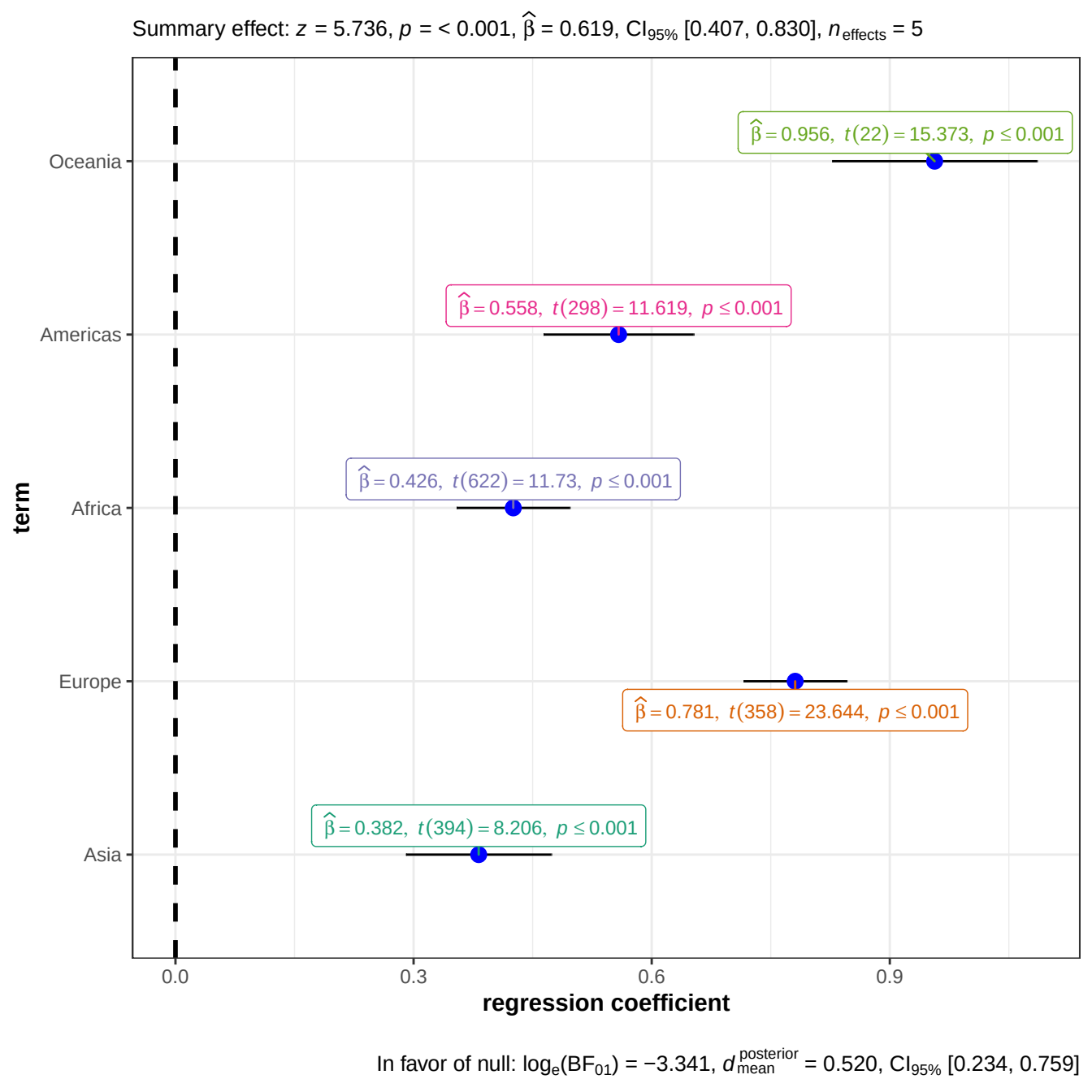

$\chi^2_{Pearson}(2) = 21.34$, $p = < 0.001$, $\widehat{V}_{Cramer} = 0.79$, $CI_{95\%}$ [0.63, 0.84], $n_{obs} = 32$
**
ns
***
100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
91%
9%
57%
43%
100%
(n = 11)
(n = 7)
(n = 14)
4
6
8
cyl
Engine
1
0
In favor of null: $\log_e(BF_{01}) = -10.31$, sampling = independent multinomial, $a = 1.00$

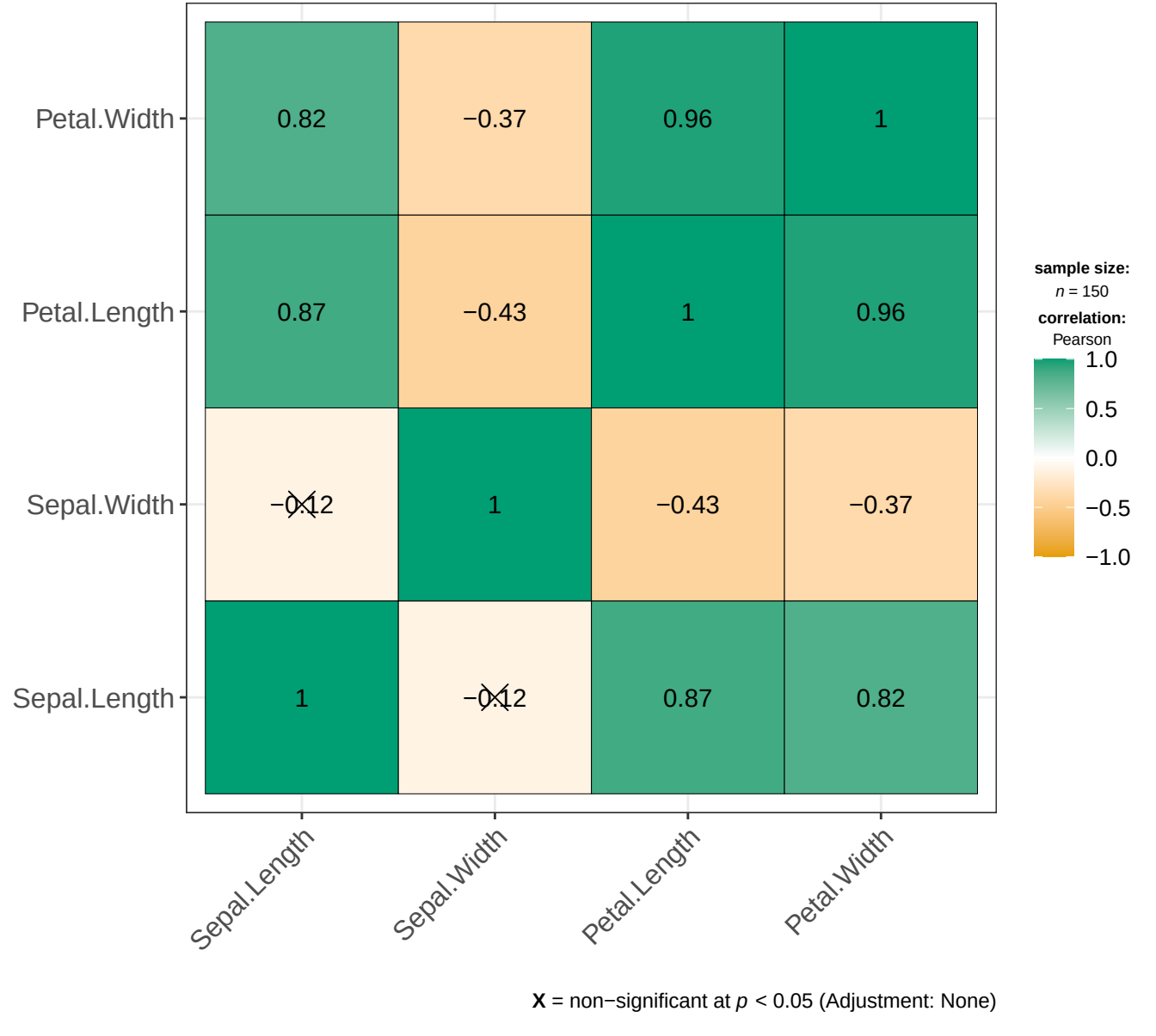

Fuel efficiency by type of car transmission
$t_{Welch}(18.33) = -3.77$, $p = 0.001$, $\hat{g}_{Hedge} = -1.38$, $CI_{95\%}$ [−2.08, −0.55], $n_{obs} = 32$
mpg
35
30
25
20
15
10
$\hat{\mu} = 17.15$
$\hat{\mu} = 24.39$
0
(n = 19)
1
(n = 13)
am
Transmission (0 = automatic, 1 = manual)
In favor of null: $\log_e(BF_{01}) = -4.46$, $r^{JZS}_{Cauchy} = 0.71$

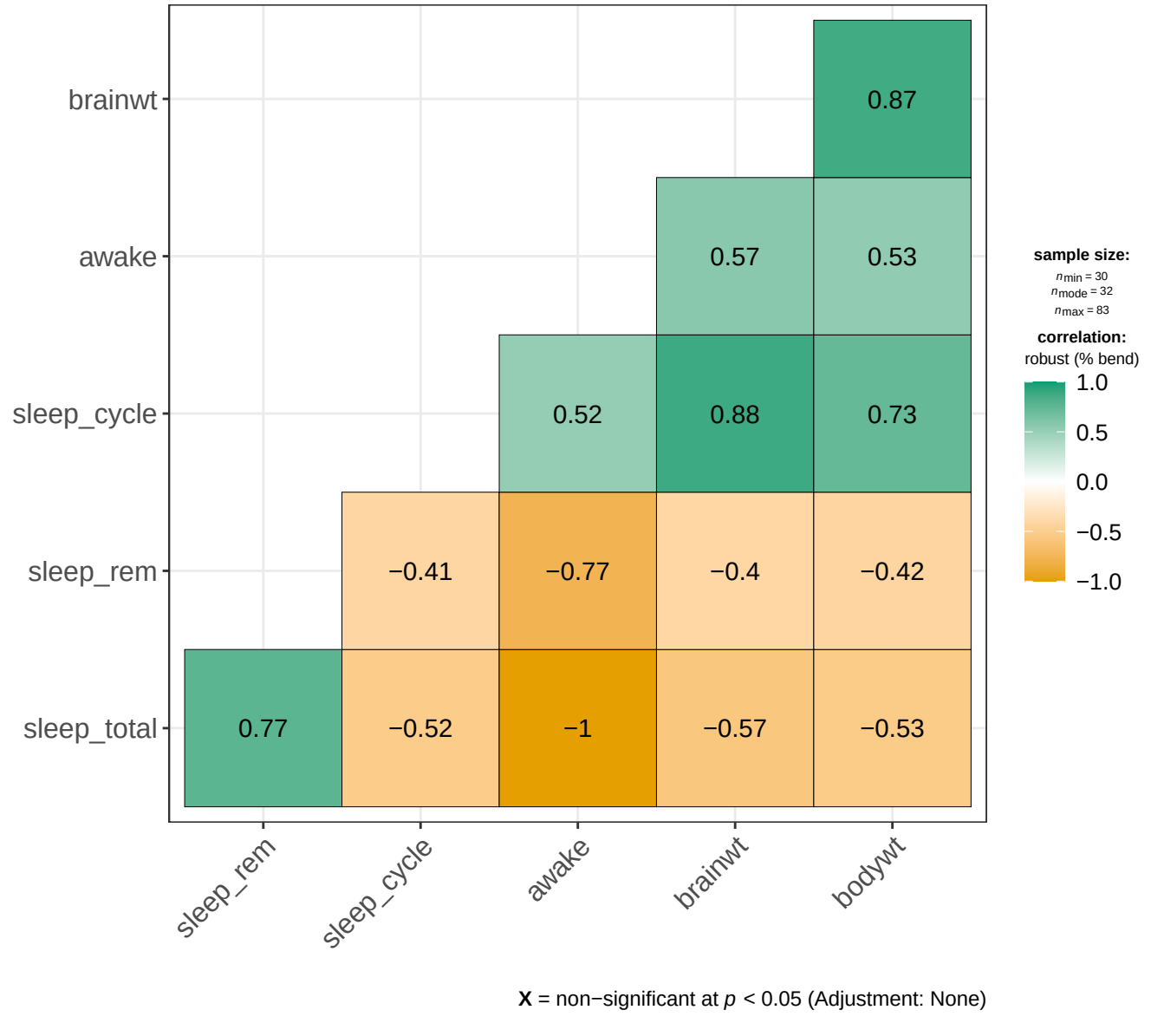

$\chi^2_{Kruskal-Wallis}(4) = 15.02$, $p = 0.005$, $\widehat{\varepsilon^2} = 0.15$, $CI_{99\%}$ [0.03, 0.28], $n_{obs} = 100$
$p_{adjusted} = 0.006$
$p_{adjusted} = 0.005$
1100
1000
900
800
700
600
Speed−of−light measurement
$\hat{\mu} = 909$
$\hat{\mu} = 856$
$\hat{\mu} = 845$
$\hat{\mu} = 820.5$
$\hat{\mu} = 831.5$
9
10
6
5
14
7
1 (n = 20)
2 (n = 20)
3 (n = 20)
4 (n = 20)
5 (n = 20)
The experiment number
Pairwise comparisons: **Dunn test**; Adjustment (p−value): **Benjamini & Hochberg**



AIC = 166, BIC = 173


Summary effect: z = 5.736, p = < 0.001, $\hat{\beta}$ = 0.619, $CI_{95\%}$ [0.407, 0.830], $n_{effects}$ = 5
$\hat{\beta} = 0.956,\ t(22) = 15.373,\ p \leq 0.001$
$\hat{\beta} = 0.558,\ t(298) = 11.619,\ p \leq 0.001$
$\hat{\beta} = 0.426,\ t(622) = 11.73,\ p \leq 0.001$
$\hat{\beta} = 0.781,\ t(358) = 23.644,\ p \leq 0.001$
$\hat{\beta} = 0.382,\ t(394) = 8.206,\ p \leq 0.001$
Oceania
Americas
Africa
Europe
Asia
term
0.0
0.3
0.6
0.9
regression coefficient
In favor of null: $\log_e(BF_{01})$ = −3.341, $d^{posterior}_{mean}$ = 0.520, $CI_{95\%}$ [0.234, 0.759]

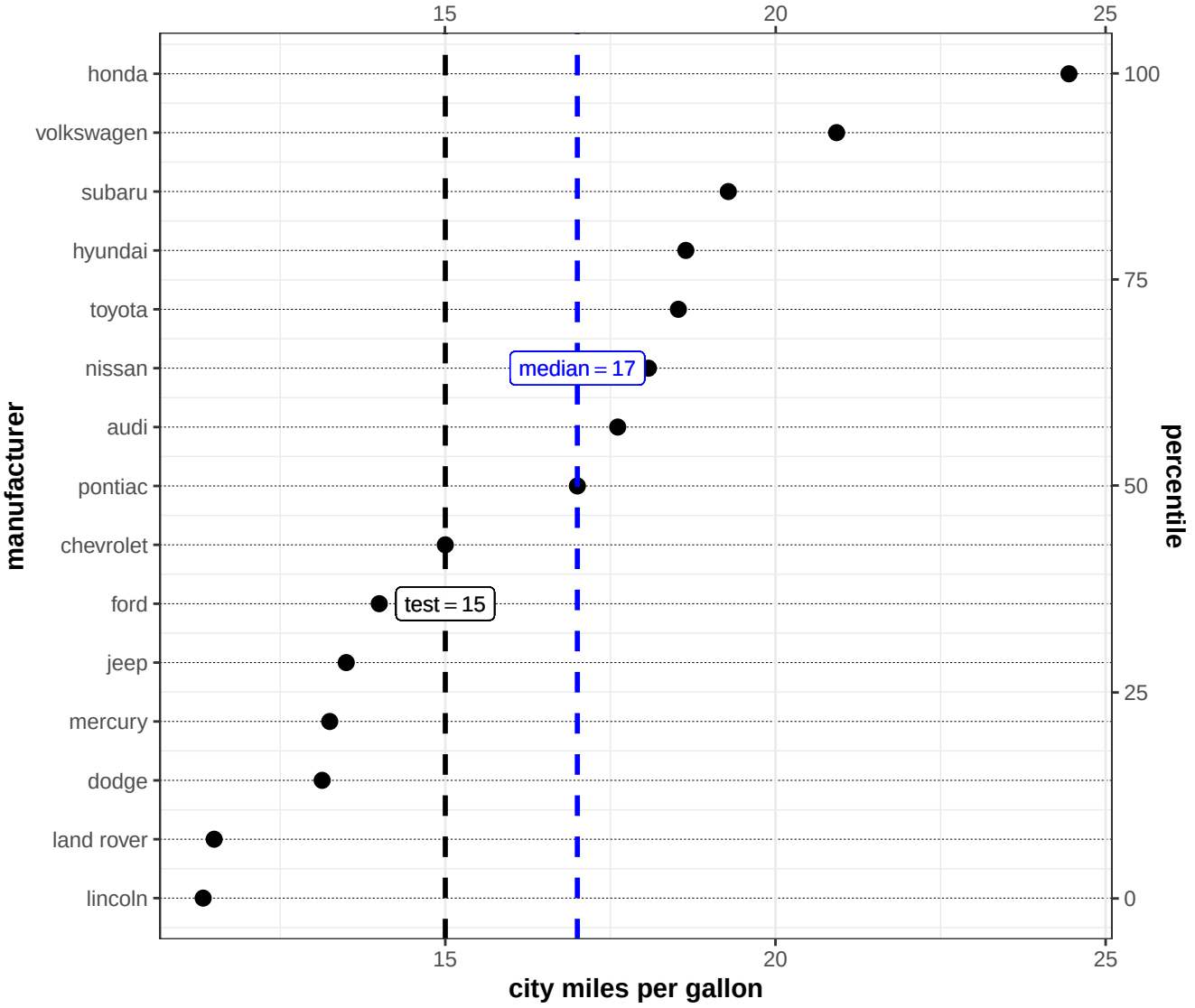

Petal.Width
Petal.Length
Sepal.Width
Sepal.Length
0.82
−0.37
0.96
1
0.87
−0.43
1
0.96
−0.12
1
−0.43
−0.37
1
−0.12
0.87
0.82
Sepal.Length
Sepal.Width
Petal.Length
Petal.Width
sample size:
n = 150
correlation:
Pearson
1.0
0.5
0.0
−0.5
−1.0
X = non−significant at p < 0.05 (Adjustment: None)



X = non−significant at $p < 0.05$ (Adjustment: None)

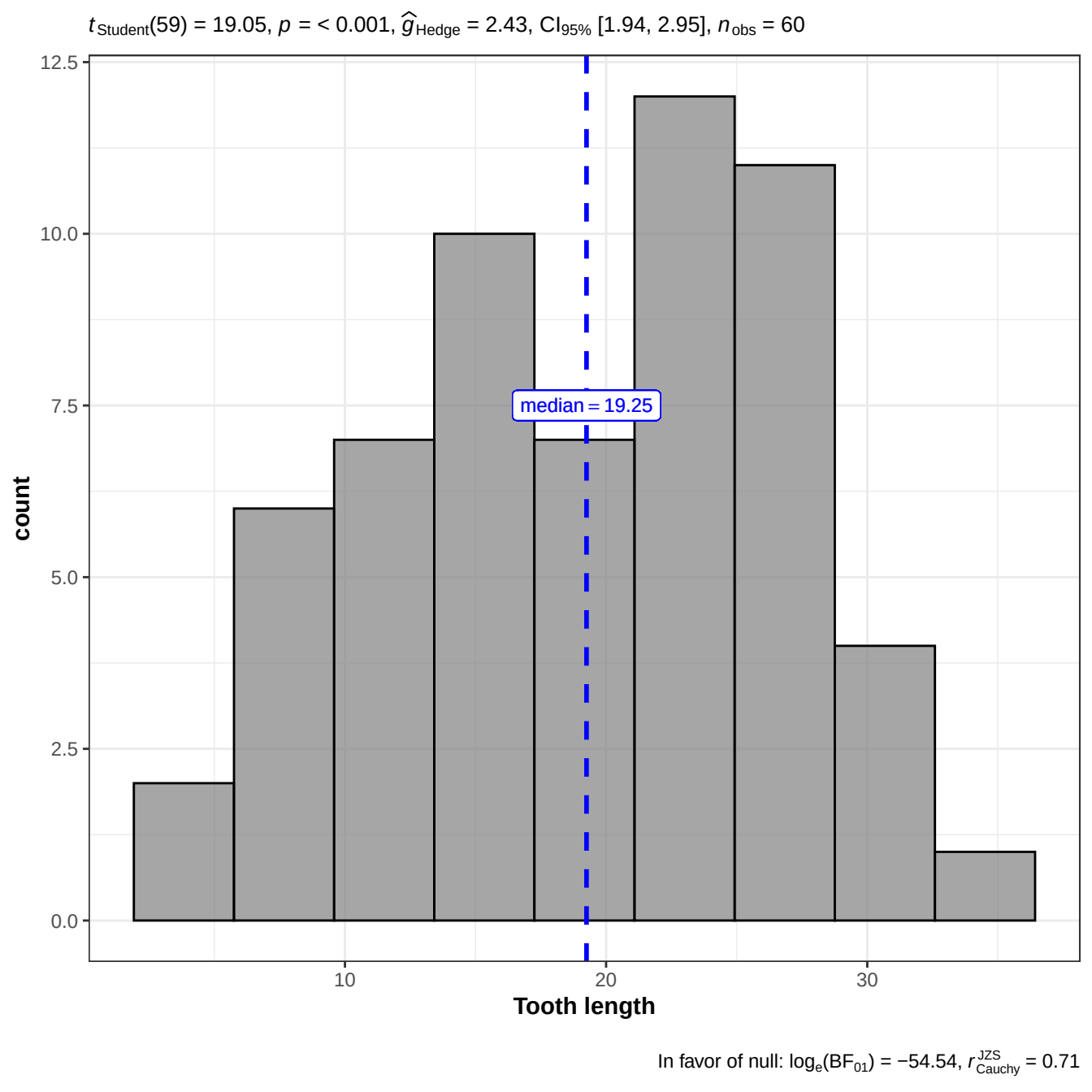
Fuel economy data

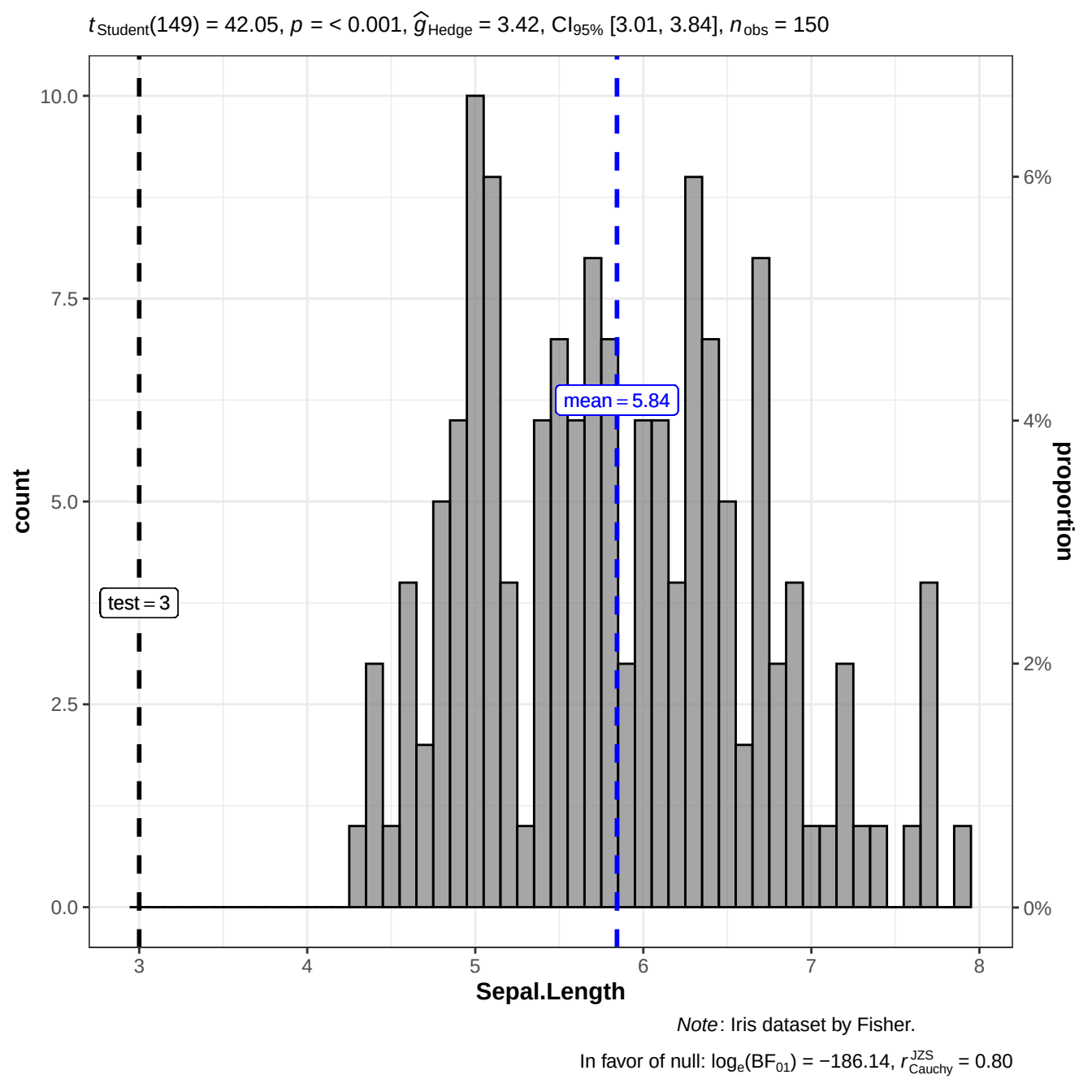
$t_{\text{Student}}(14) = 1.47$, $p = 0.163$, $\widehat{g}_{\text{Hedge}} = 0.36$, $\text{CI}_{99\%}$ [−0.31, 1.04], $n_{\text{obs}} = 15$



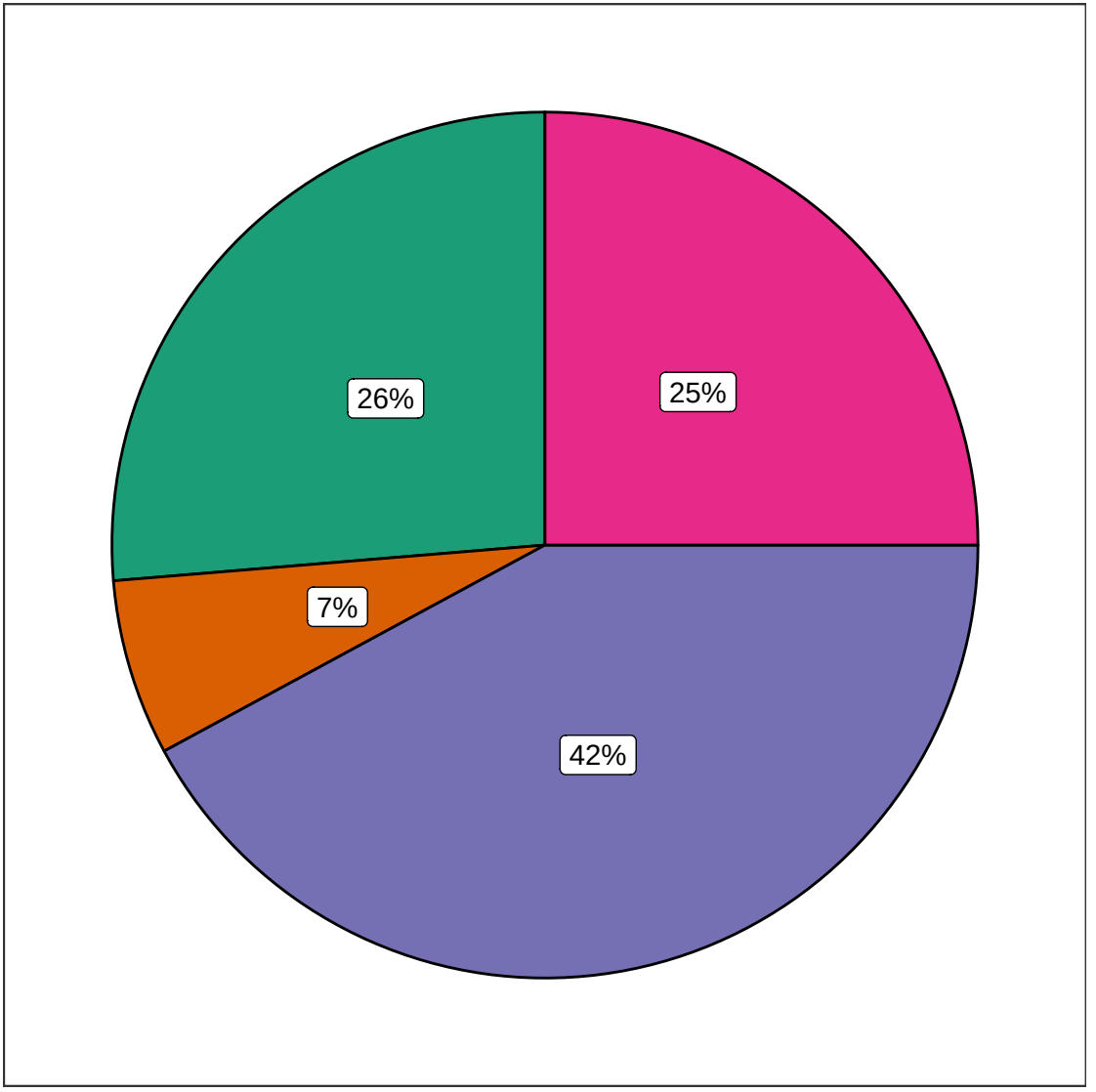
Source: EPA dataset on http://fueleconomy.gov

In favor of null: $\log_e(\text{BF}_{01}) = 0.44$, $r^{\text{JZS}}_{\text{Cauchy}} = 0.71$

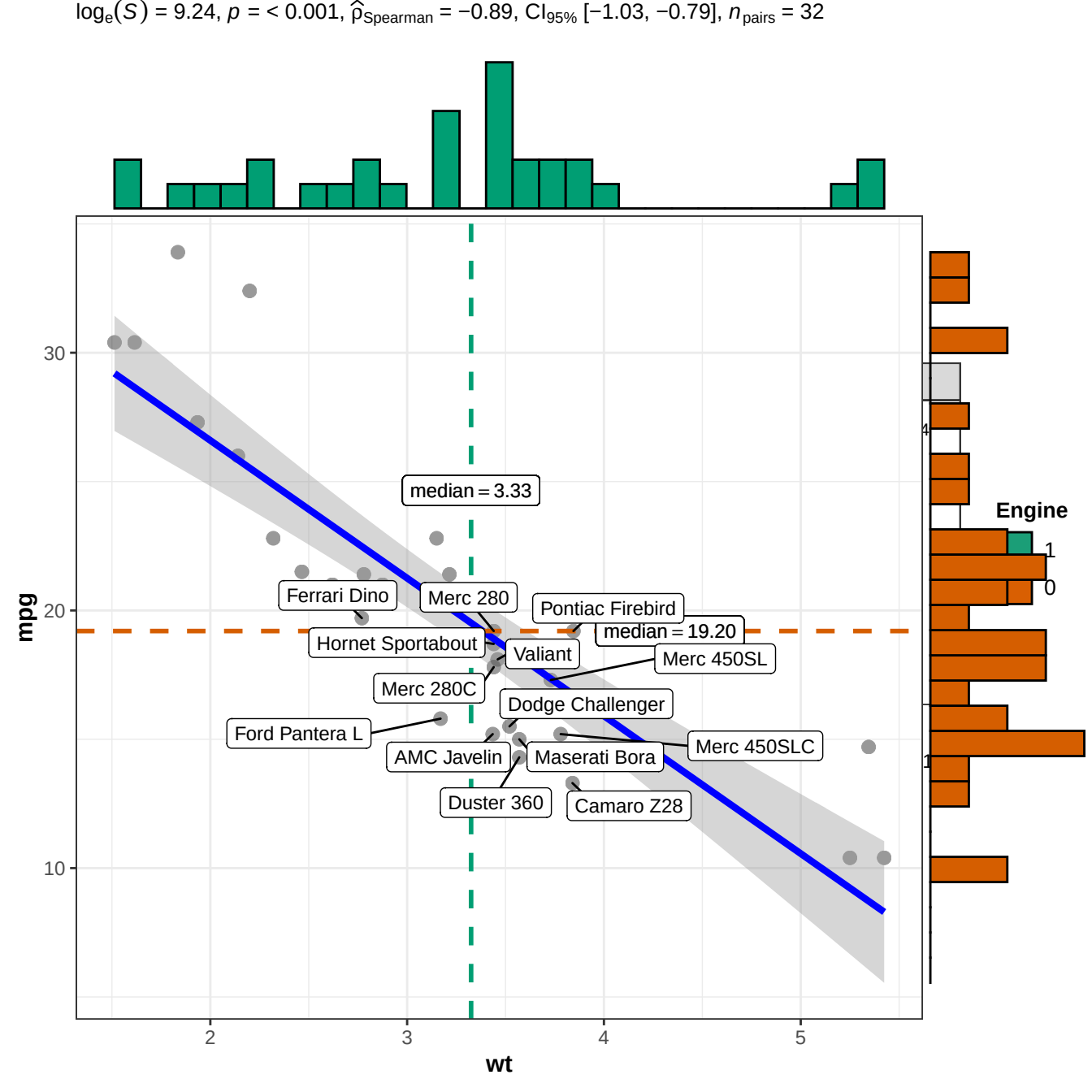

$t_{Student}(59) = 19.05$, $p = < 0.001$, $\widehat{g}_{Hedge} = 2.43$, $CI_{95\%}$ [1.94, 2.95], $n_{obs} = 60$
median = 19.25
count
Tooth length
12.5
10.0
7.5
5.0
2.5
0.0
10
20
30
In favor of null: $\log_e(BF_{01}) = -54.54$, $r^{JZS}_{Cauchy} = 0.71$

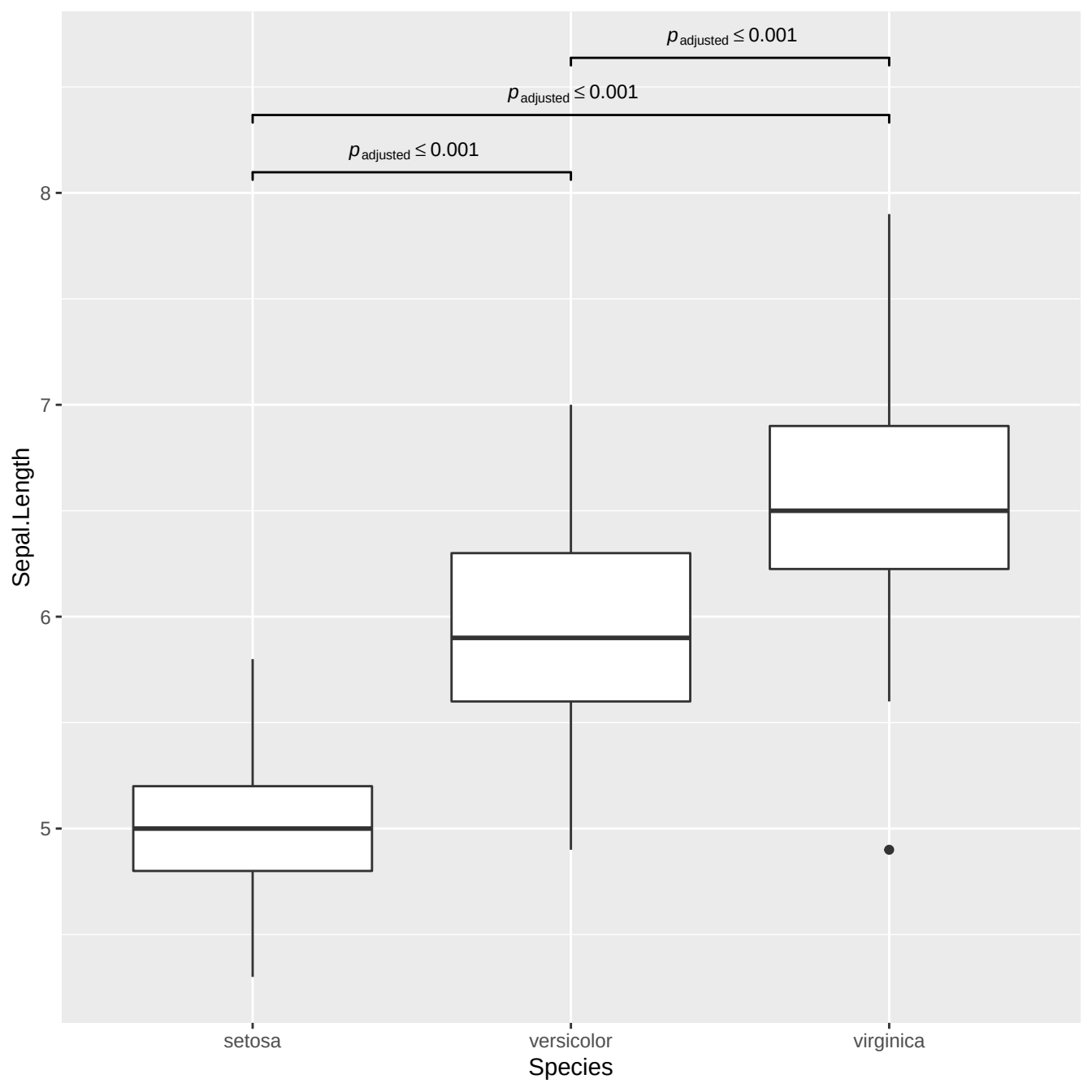

$t_{Student}(149) = 42.05$, $p = < 0.001$, $\widehat{g}_{Hedge} = 3.42$, $CI_{95\%}$ [3.01, 3.84], $n_{obs} = 150$
10.0
7.5
5.0
2.5
0.0
count
6%
4%
2%
0%
proportion
mean = 5.84
test = 3
3
4
5
6
7
8
Sepal.Length
Note: Iris dataset by Fisher.
In favor of null: $\log_e(BF_{01}) = -186.14$, $r^{JZS}_{Cauchy} = 0.80$

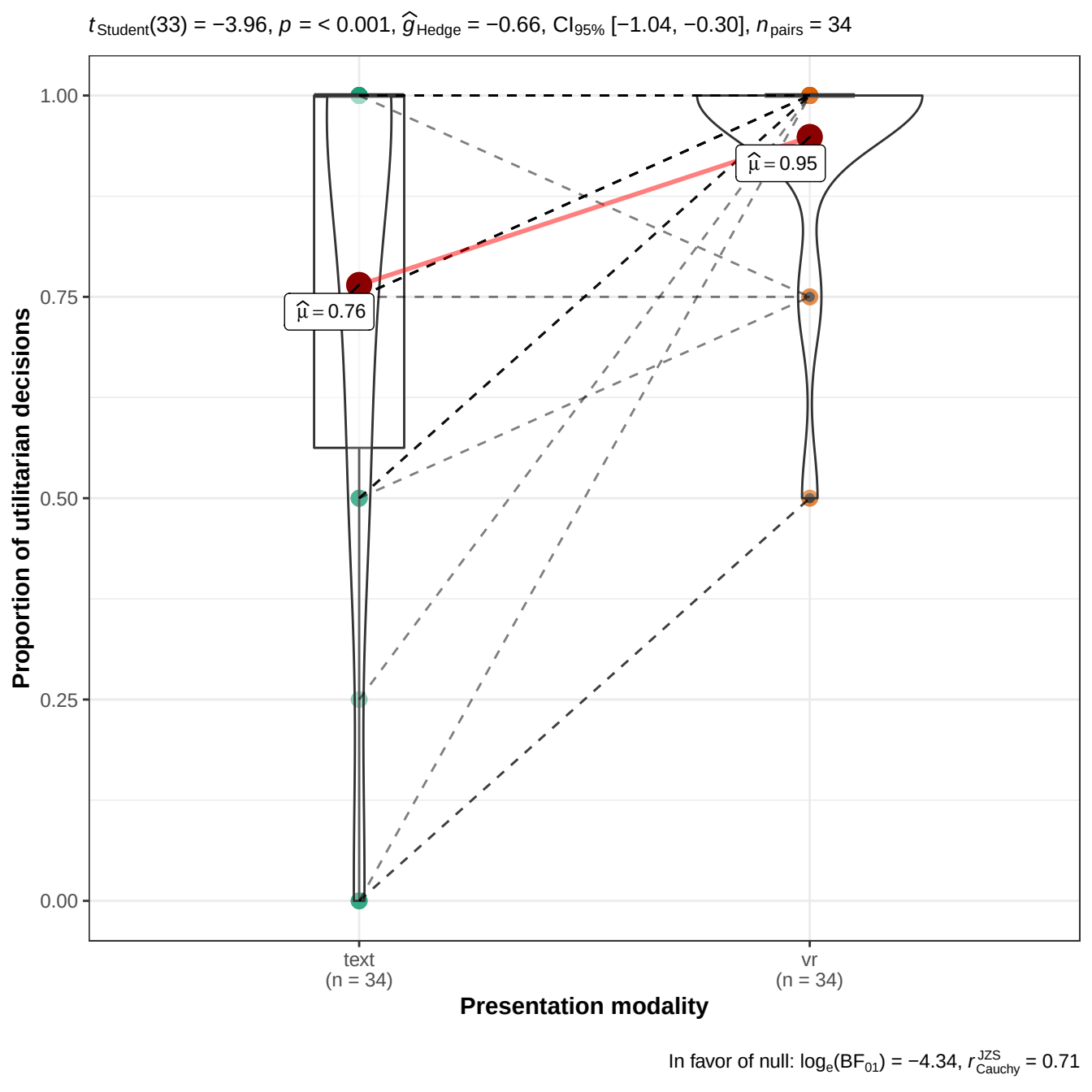
$\chi^2_{gof}(3) = 19.26$, $p = < 0.001$, $\widehat{V}_{Cramer} = 0.29$, $CI_{95\%}$ [0.18, 0.37], $n_{obs} = 76$

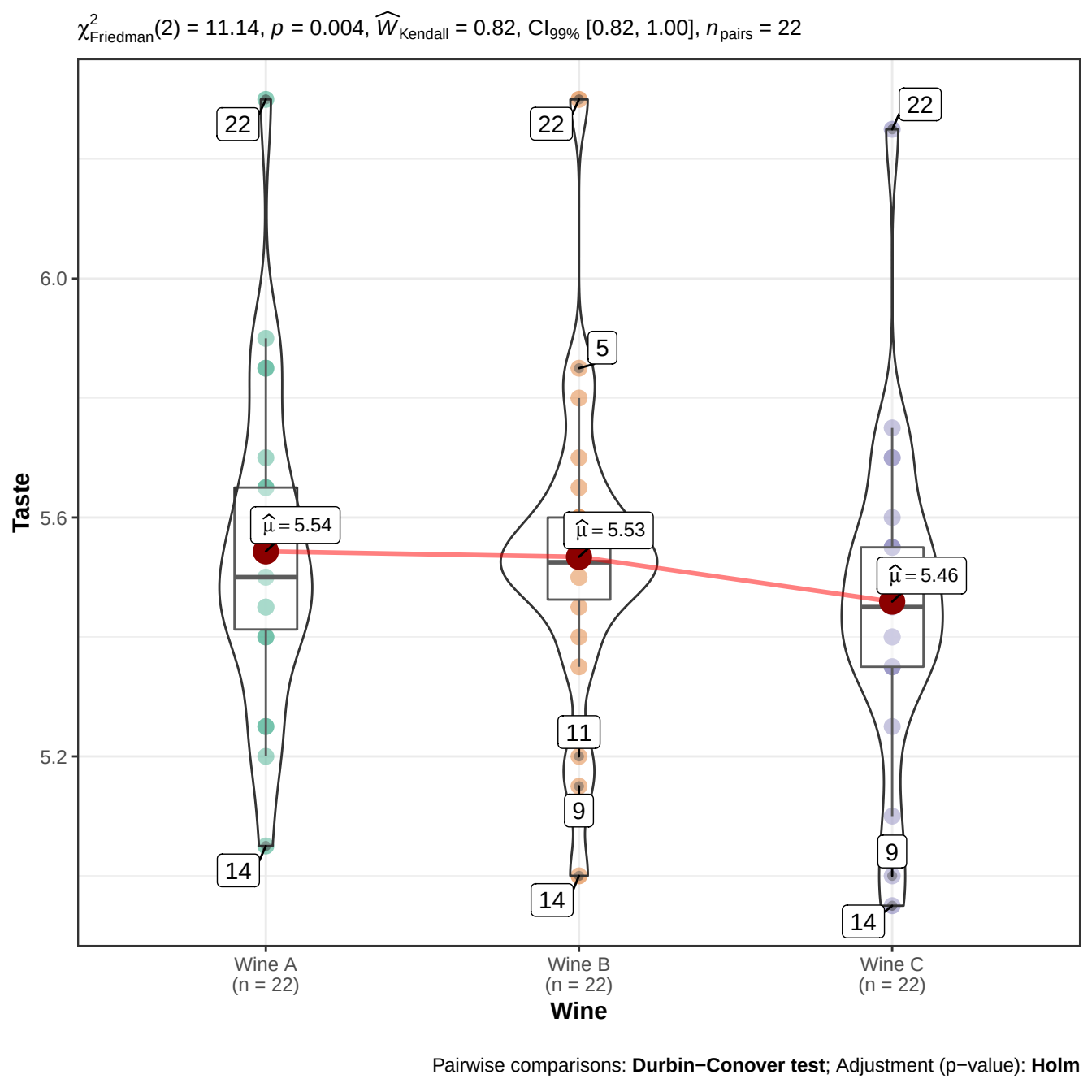


In favor of null: $\log_e(BF_{01}) = -3.73$, $a = 1.00$


log$_e$(S) = 9.24, p = < 0.001, $\hat{\rho}_{Spearman}$ = −0.89, $CI_{95\%}$ [−1.03, −0.79], n_{pairs} = 32
median = 3.33
median = 19.20
Ferrari Dino
Merc 280
Pontiac Firebird
Hornet Sportabout
Valiant
Merc 450SL
Merc 280C
Dodge Challenger
Ford Pantera L
AMC Javelin
Maserati Bora
Merc 450SLC
Duster 360
Camaro Z28
mpg
wt
Engine
30
20
10
2
3
4
5
1
0

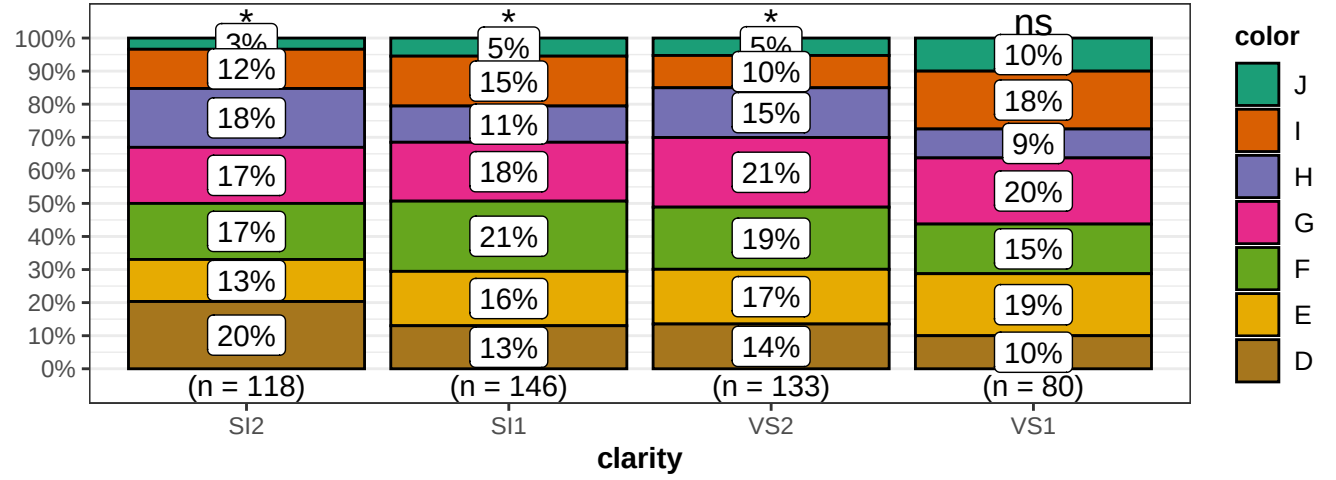

$p_{adjusted} \leq 0.001$
$p_{adjusted} \leq 0.001$
$p_{adjusted} \leq 0.001$
8
7
6
5
Sepal.Length
setosa
versicolor
virginica
Species


$t_{Student}(33) = -3.96$, $p = < 0.001$, $\hat{g}_{Hedge} = -0.66$, $CI_{95\%}$ [−1.04, −0.30], $n_{pairs} = 34$
1.00
0.75
0.50
0.25
0.00
Proportion of utilitarian decisions
$\hat{\mu} = 0.76$
$\hat{\mu} = 0.95$
text
(n = 34)
vr
(n = 34)
Presentation modality
In favor of null: $\log_e(BF_{01}) = -4.34$, $r^{JZS}_{Cauchy} = 0.71$


$\chi^2_{Friedman}(2) = 11.14$, $p = 0.004$, $\widehat{W}_{Kendall} = 0.82$, $CI_{99\%}$ [0.82, 1.00], $n_{pairs} = 22$
Taste
6.0
5.6
5.2
22
22
22
5
11
9
14
14
9
14
$\hat{\mu} = 5.54$
$\hat{\mu} = 5.53$
$\hat{\mu} = 5.46$
Wine A
(n = 22)
Wine B
(n = 22)
Wine C
(n = 22)
Wine
Pairwise comparisons: **Durbin–Conover test**; Adjustment (p–value): **Holm**

Quality: Very Good

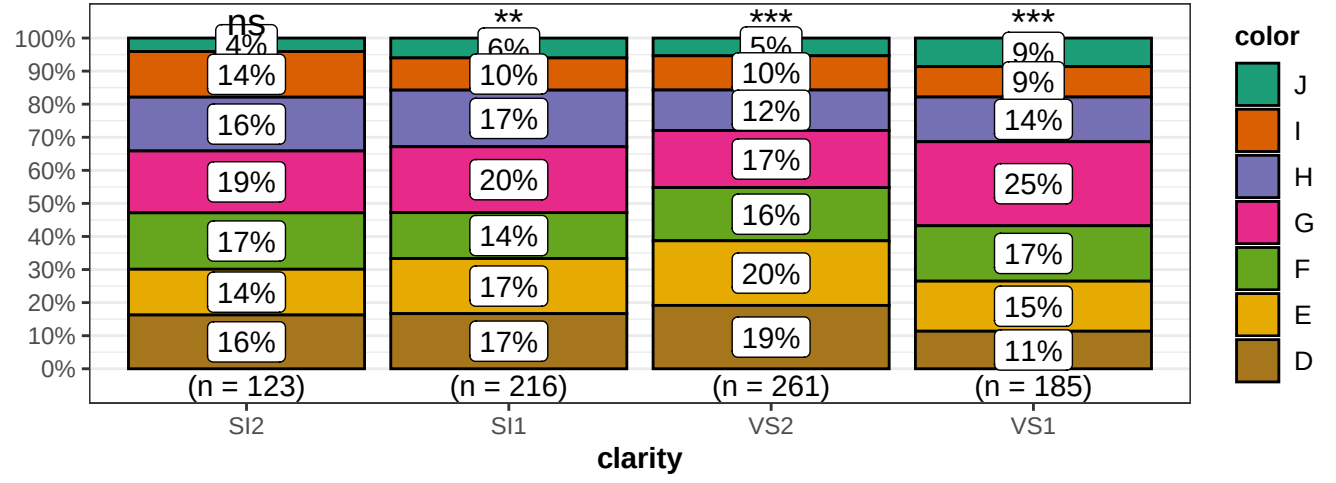
$\chi^2_{Pearson}(18) = 17.95$, $p = 0.459$, $\widehat{V}_{Cramer} = 0.00$, $CI_{95\%}$ [−0.18, −0.04], $n_{obs} = 477$



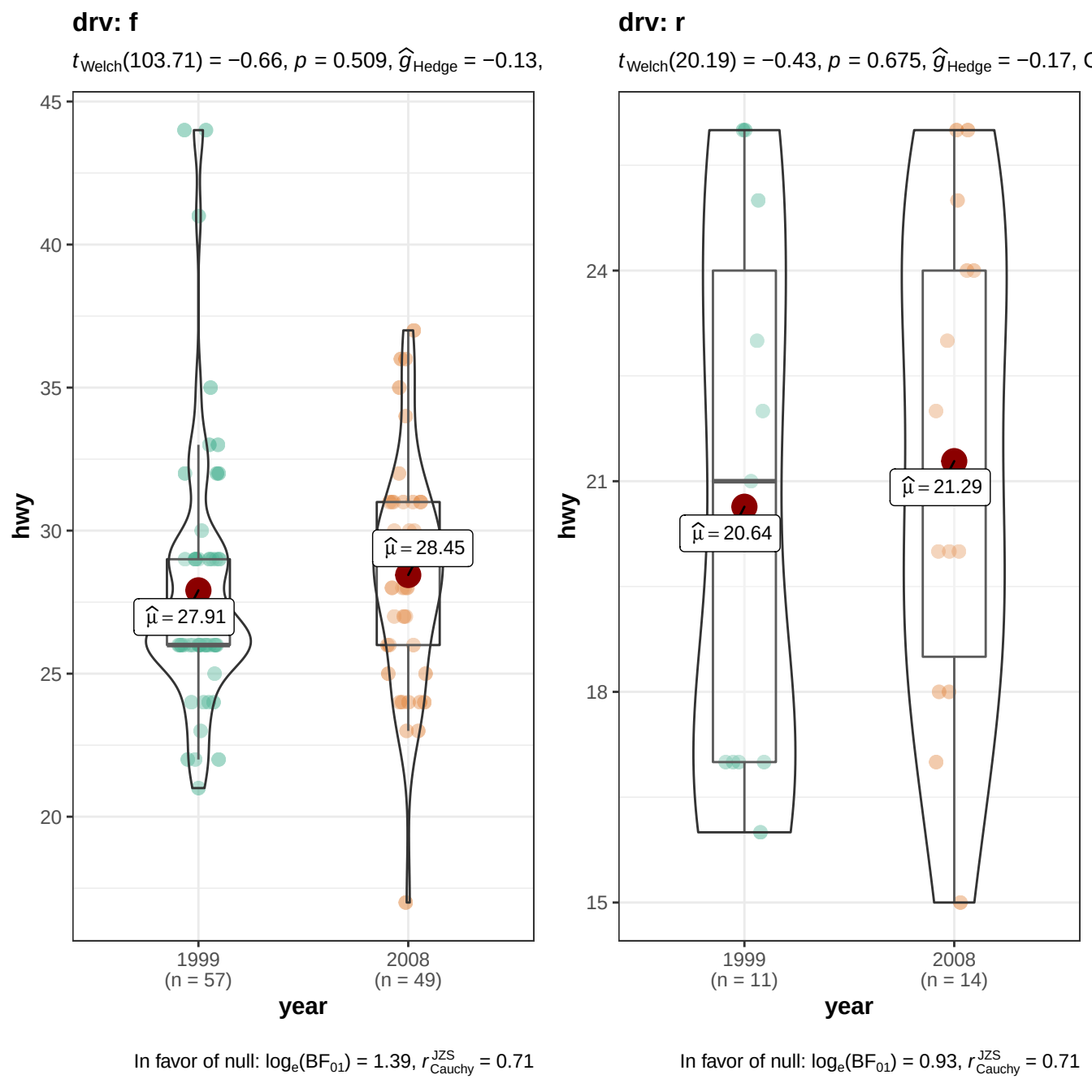
In favor of null: $\log_e(BF_{01}) = 16.13$, sampling = independent multinomial, $a = 1.00$

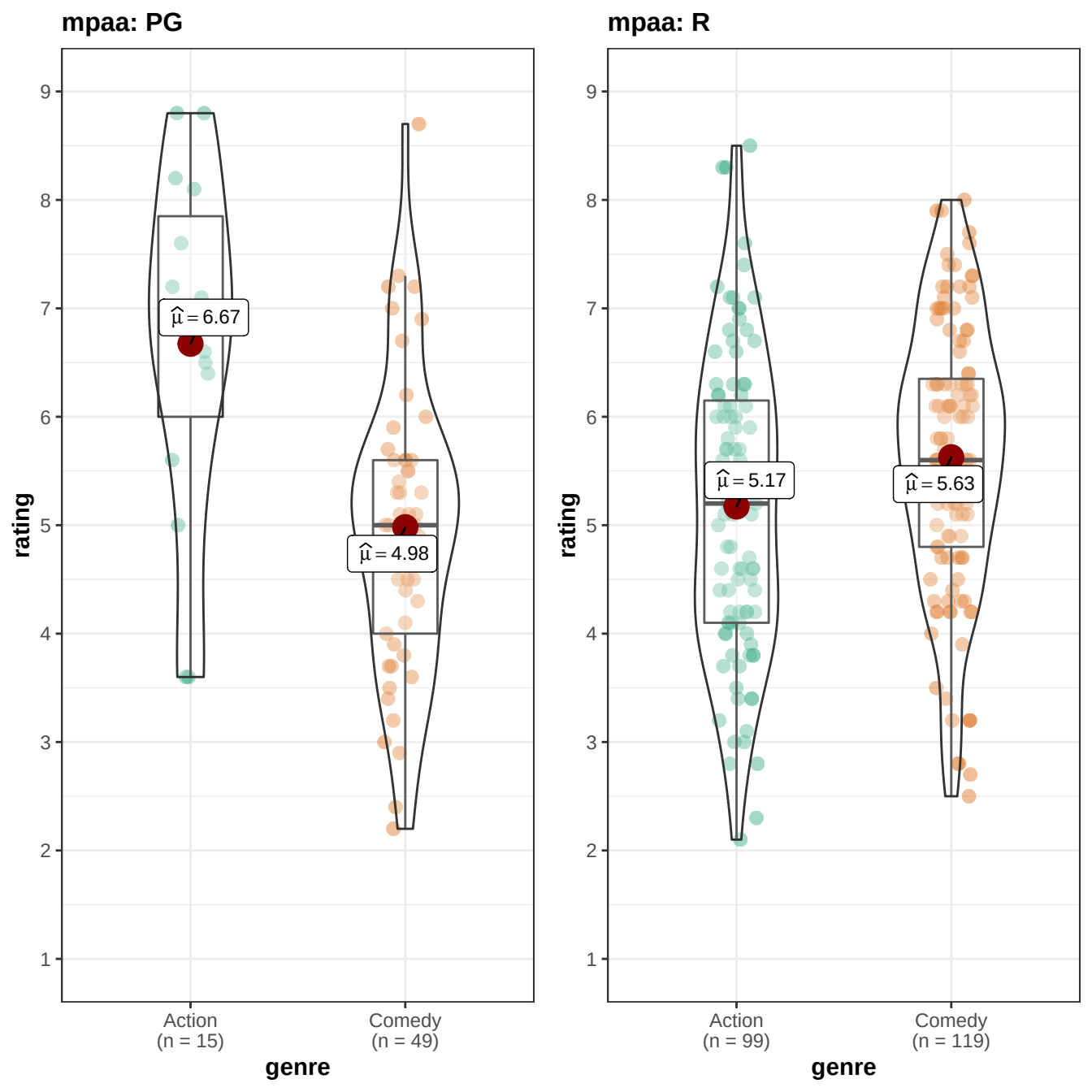
Quality: Ideal

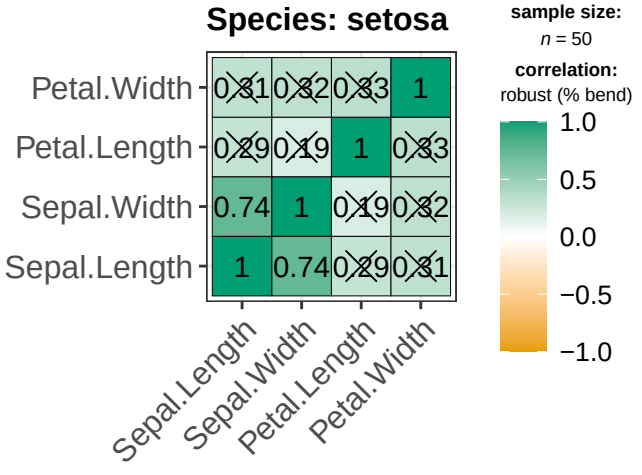
$\chi^2_{Pearson}(18) = 17.85$, $p = 0.466$, $\widehat{V}_{Cramer} = 0.00$, $CI_{95\%}$ [−0.14, −0.03], $n_{obs} = 785$



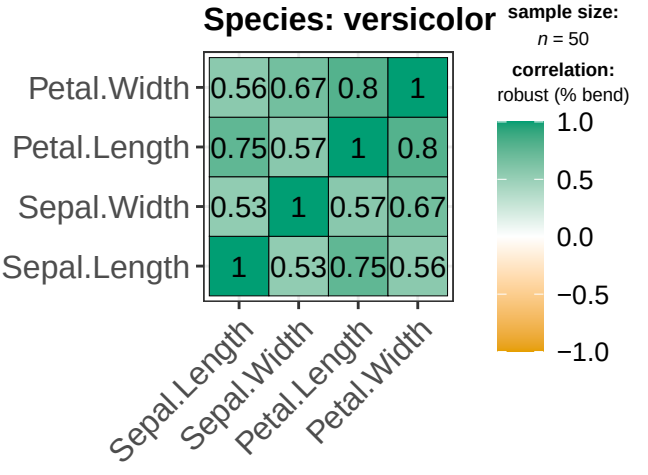
In favor of null: $\log_e(BF_{01}) = 20.36$, sampling = independent multinomial, $a = 1.00$


drv: f
$t_{Welch}(103.71) = -0.66$, $p = 0.509$, $\hat{g}_{Hedge} = -0.13$,
hwy
45
40
35
30
25
20
$\hat{\mu} = 27.91$
$\hat{\mu} = 28.45$
1999
(n = 57)
2008
(n = 49)
year
In favor of null: $\log_e(BF_{01}) = 1.39$, $r^{JZS}_{Cauchy} = 0.71$
drv: r
$t_{Welch}(20.19) = -0.43$, $p = 0.675$, $\hat{g}_{Hedge} = -0.17$, C
hwy
24
21
18
15
$\hat{\mu} = 20.64$
$\hat{\mu} = 21.29$
1999
(n = 11)
2008
(n = 14)
year
In favor of null: $\log_e(BF_{01}) = 0.93$, $r^{JZS}_{Cauchy} = 0.71$

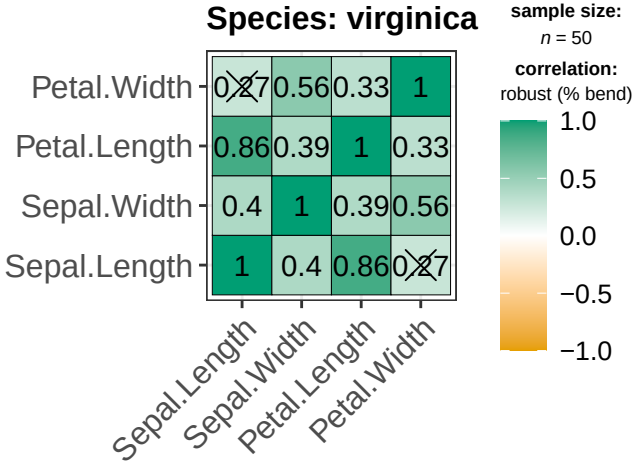

mpaa: PG
mpaa: R
rating
genre
Action
(n = 15)
Comedy
(n = 49)
Action
(n = 99)
Comedy
(n = 119)
μ̂ = 6.67
μ̂ = 4.98
μ̂ = 5.17
μ̂ = 5.63
1
2
3
4
5
6
7
8
9



n−significant at $p < 0.05$ (Adjustment: Holm)



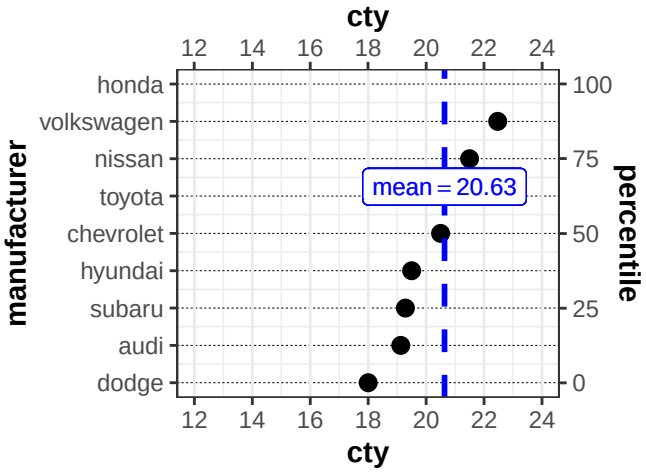
X = non−significant at $p < 0.05$ (Adjustment: Holm)



n−significant at $p < 0.05$ (Adjustment: Holm)

cylinder count: 4

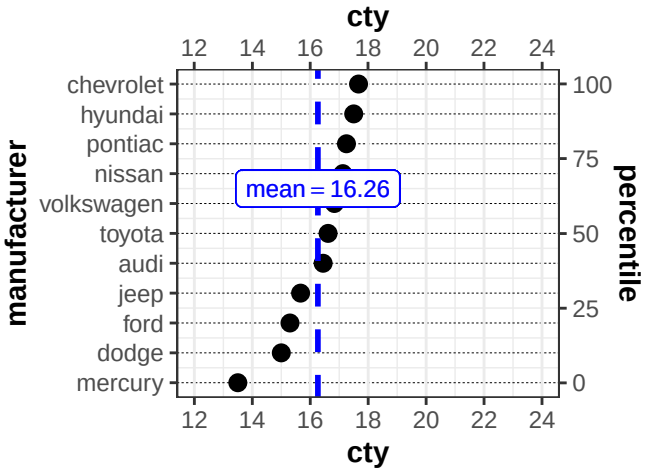
$t_{\text{Student}}(8) = 7.82$, $p = < 0.001$, $\widehat{g}_{\text{Hedge}} = 2.$



In favor of null: $\log_e(\text{BF}_{01}) = -6.20$, $r^{\text{JZS}}_{\text{Cauchy}} = 0.71$

cylinder count: 6

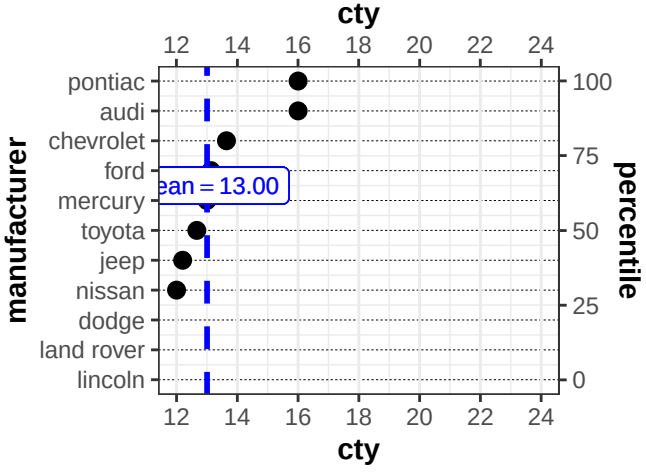
$t_{\text{Student}}(10) = 1.99$, $p = 0.075$, $\widehat{g}_{\text{Hedge}} = 0.5$



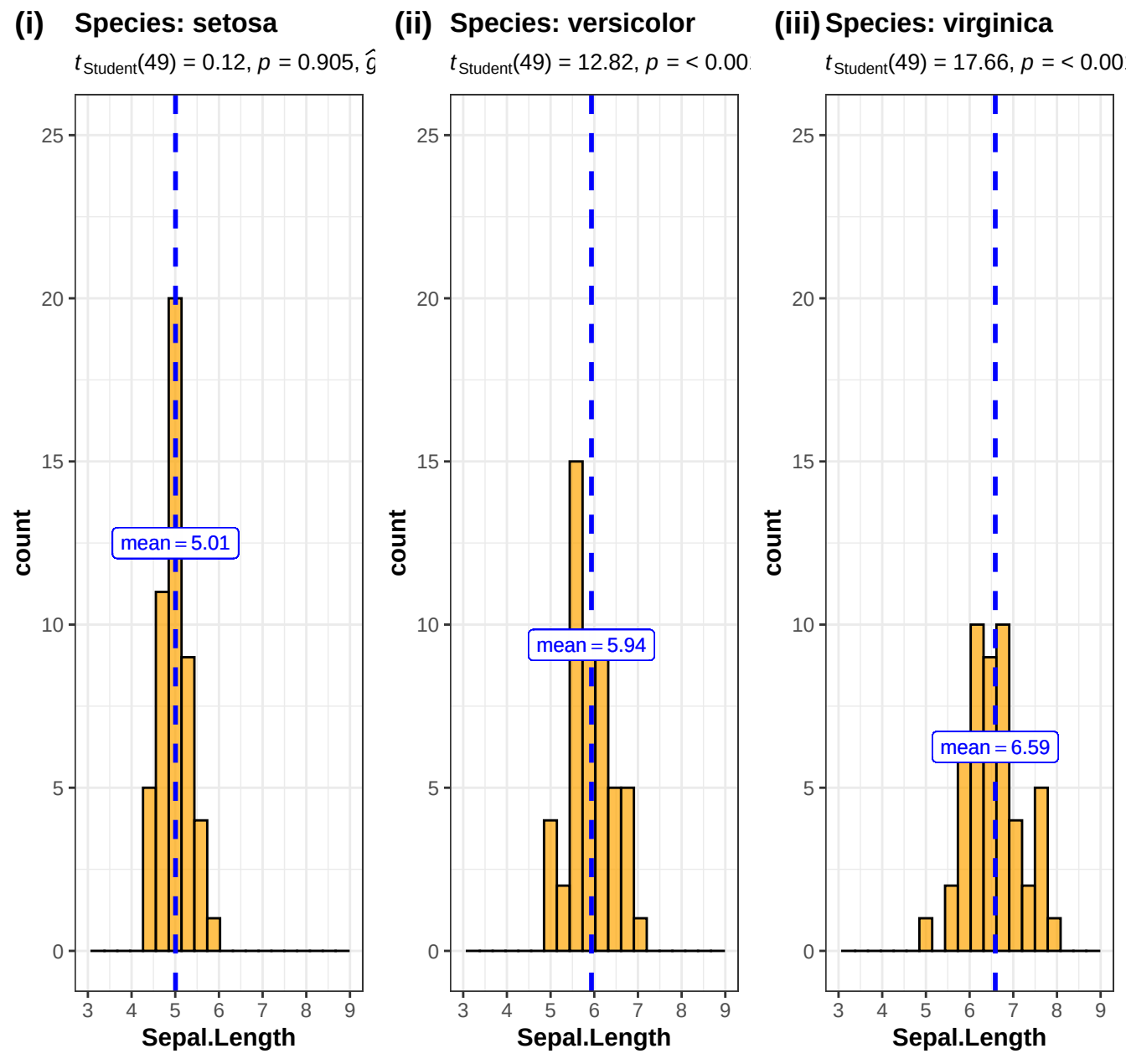
In favor of null: $\log_e(\text{BF}_{01}) = -0.23$, $r^{\text{JZS}}_{\text{Cauchy}} = 0.71$

cylinder count: 8

$t_{\text{Student}}(10) = -5.01$, $p = 0.001$, $\widehat{g}_{\text{Hedge}} = -1.40$, $\text{CI}_{95\%}$ [−2.30, −0.60], $n_{\text{obs}} = 11$

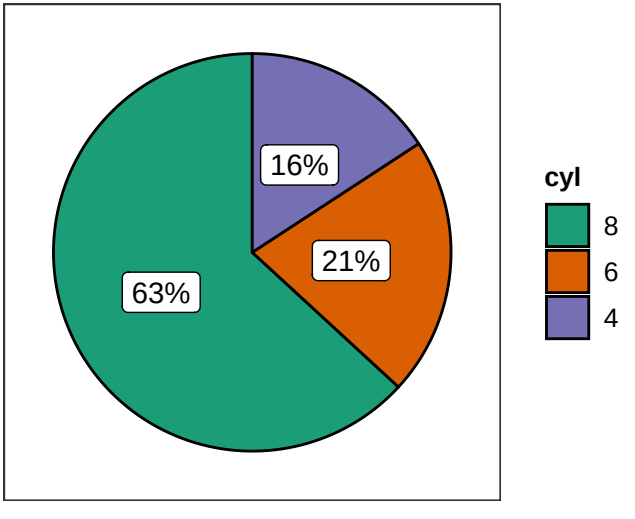


In favor of null: $\log_e(\text{BF}_{01}) = -4.24$, $r^{\text{JZS}}_{\text{Cauchy}} = 0.71$


(i) Species: setosa
$t_{Student}(49) = 0.12, p = 0.905, \hat{g}$
(ii) Species: versicolor
$t_{Student}(49) = 12.82, p = < 0.00$
(iii) Species: virginica
$t_{Student}(49) = 17.66, p = < 0.00$
count
Sepal.Length
mean = 5.01
mean = 5.94
mean = 6.59
0
5
10
15
20
25
3
4
5
6
7
8
9
or of null: $\log_e(BF_{01}) = 1.86, r^{JZS}_{Cauchy}$ = 0.71
$\log_e(BF_{01}) = -32.95, r^{JZS}_{Cauchy}$ = 0.71
$\log_e(BF_{01}) = -45.50, r^{JZS}_{Cauchy} = 0.71$

am: 0

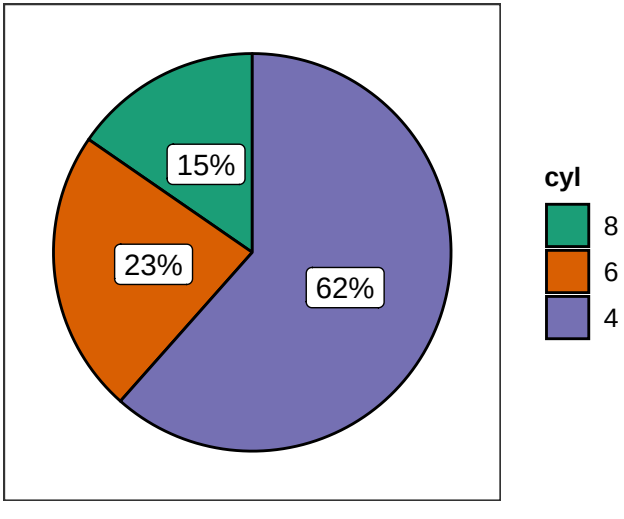
$\chi^2_{gof}(2) = 7.68$, $p = 0.021$, $\widehat{V}_{Cramer} = 0.45$, $CI_{95\%}$ [0.11, 0.



In favor of null: $\log_e(BF_{01}) = -0.16$, $a = 1.00$

am: 1

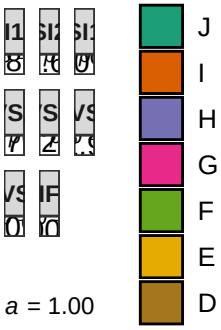
$\chi^2_{gof}(2) = 4.77$, $p = 0.092$, $\widehat{V}_{Cramer} = 0.43$, $CI_{95\%}$ [0.12, 0.



In favor of null: $\log_e(BF_{01}) = 0.85$, $a = 1.00$

Quality: Fair

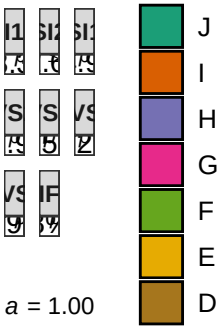
$\chi^2_{\text{Pearson}}(42) = 55.71$, $p = 0.076$, $\widehat{V}_{\text{Cramer}} = 0.12$, $\text{CI}_{95\%}$ [−0.05, 0.07],



favor of null: $\log_e(\text{BF}_{01}) = -7.86$, sampling = poisson, $a = 1.00$

Quality: Very Good

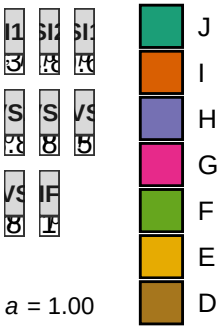
$\chi^2_{\text{Pearson}}(42) = 64.05$, $p = 0.016$, $\widehat{V}_{\text{Cramer}} = 0.06$, $\text{CI}_{95\%}$ [−0.01, 0.04],



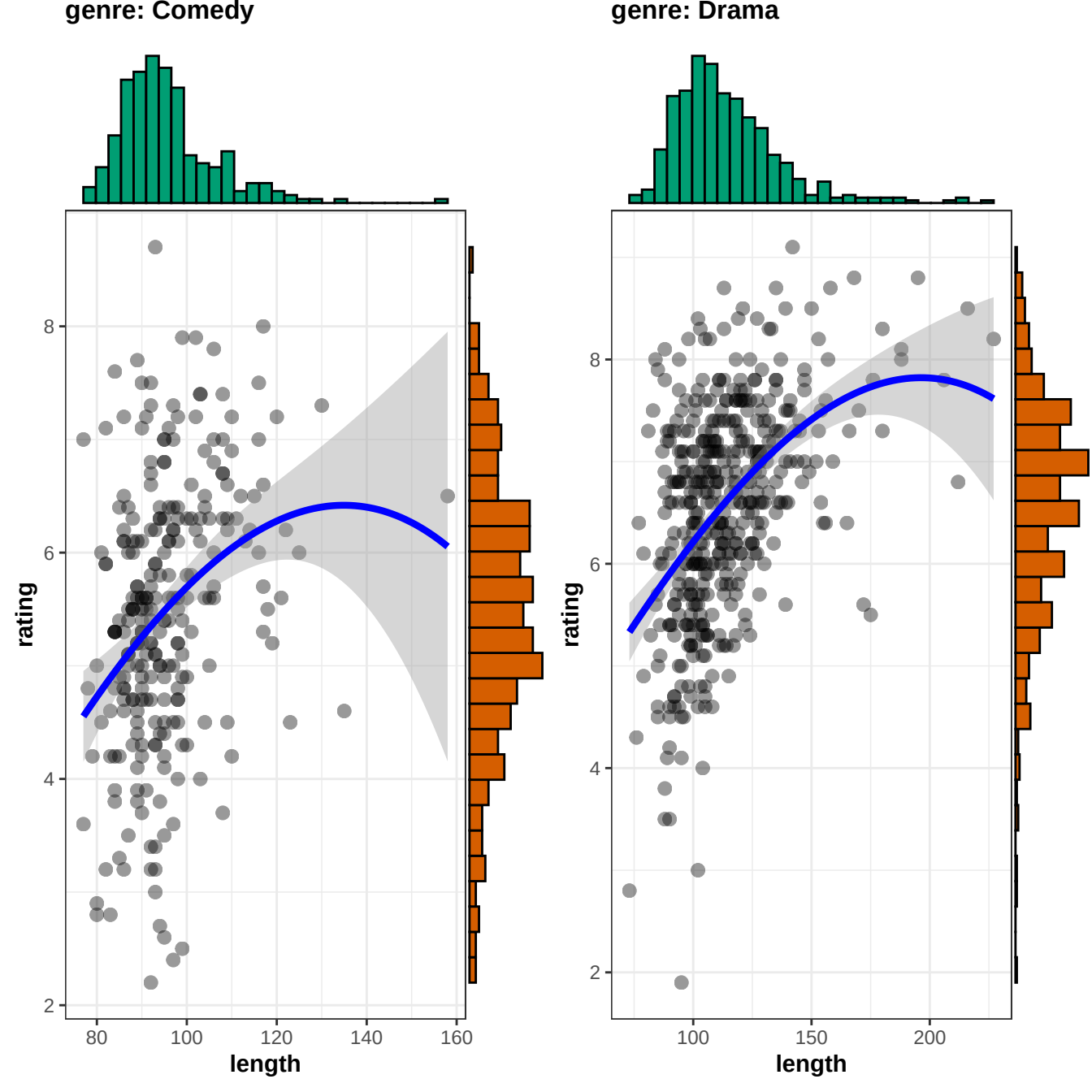
favor of null: $\log_e(\text{BF}_{01}) = 14.79$, sampling = poisson, $a = 1.00$

Quality: Ideal

$\chi^2_{\text{Pearson}}(42) = 153.32$, $p = < 0.001$, $\widehat{V}_{\text{Cramer}} = 0.09$, $\text{CI}_{95\%}$ [0.06, 0.10

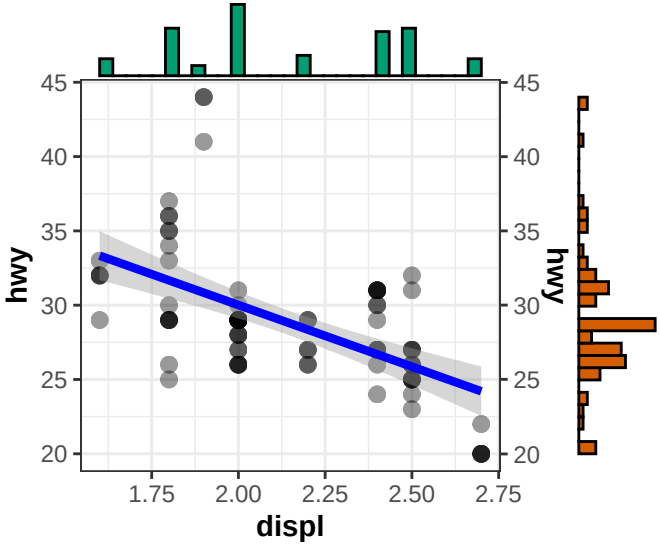


avor of null: $\log_e(\text{BF}_{01}) = -25.04$, sampling = poisson, $a = 1.00$


genre: Comedy
genre: Drama
rating
length
8
6
4
2
80
100
120
140
160
150
200

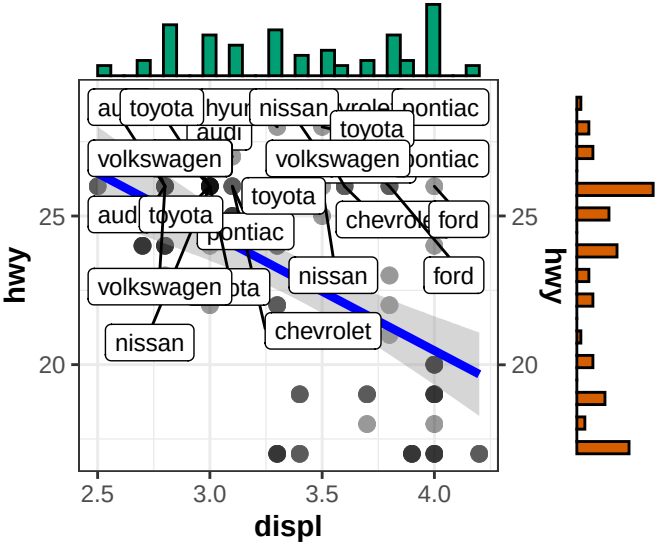
Cylinder count: 4

$t(79) = -6.93$, $p = < 0.001$, $\hat{\rho}_{pb} = -0$



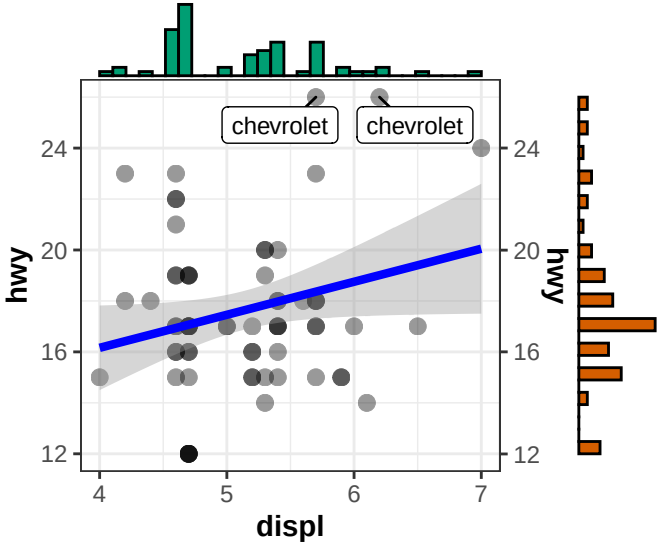
Cylinder count: 6

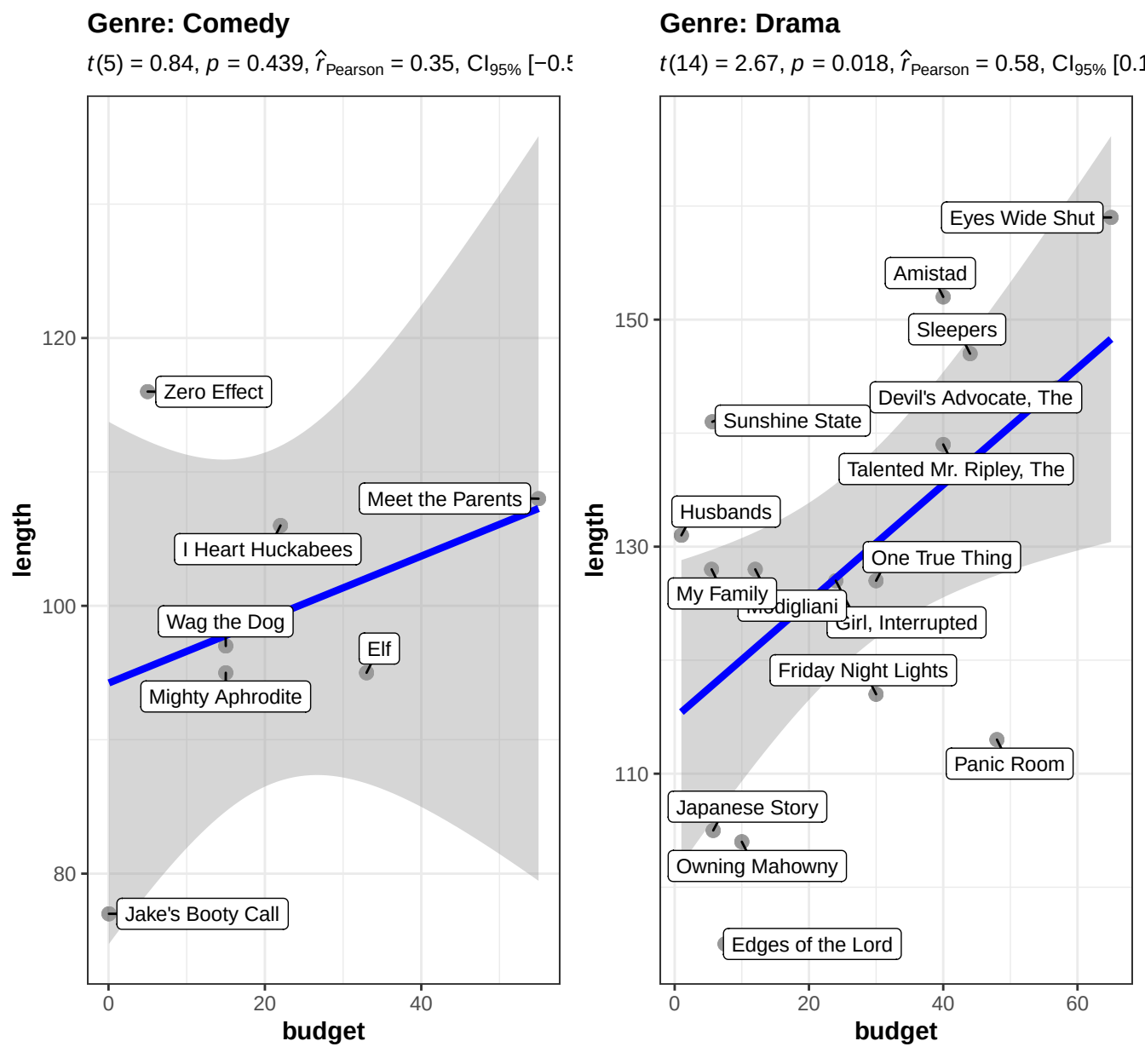
$t(77) = -5.13$, $p = < 0.001$, $\hat{\rho}_{pb} = -0$



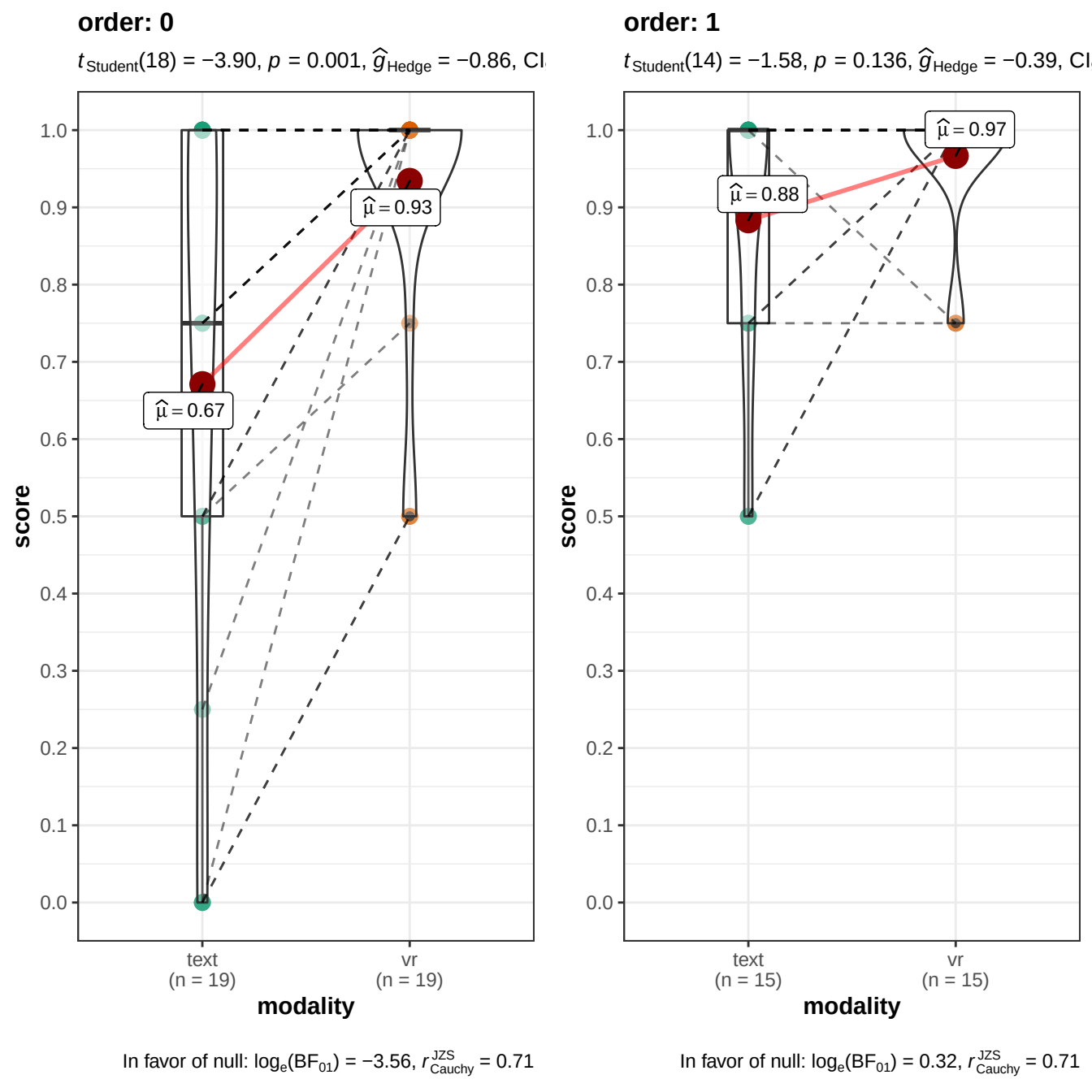
Cylinder count: 8

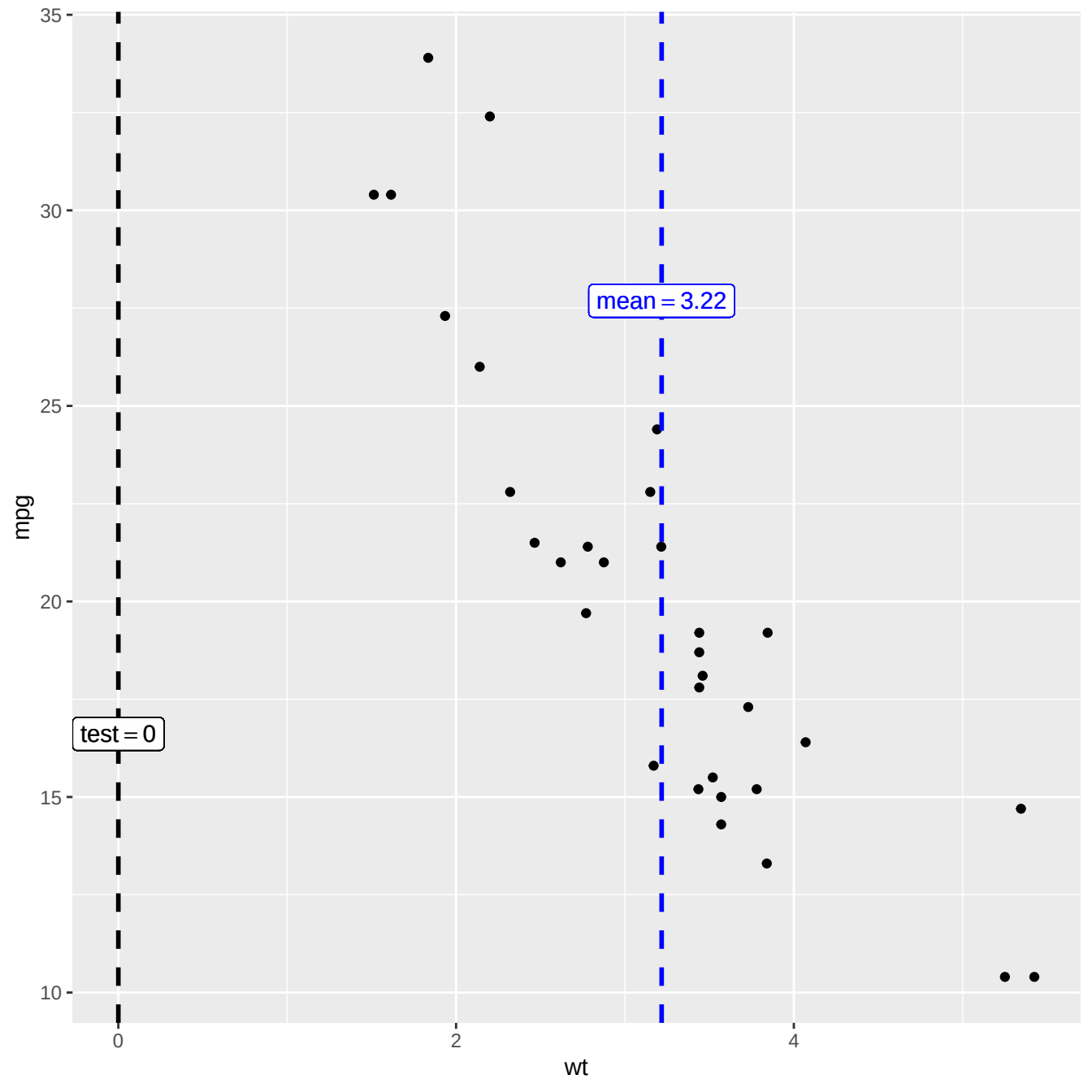
$t(68) = 1.25$, $p = 0.216$, $\hat{\rho}_{pb} = 0.15$, (

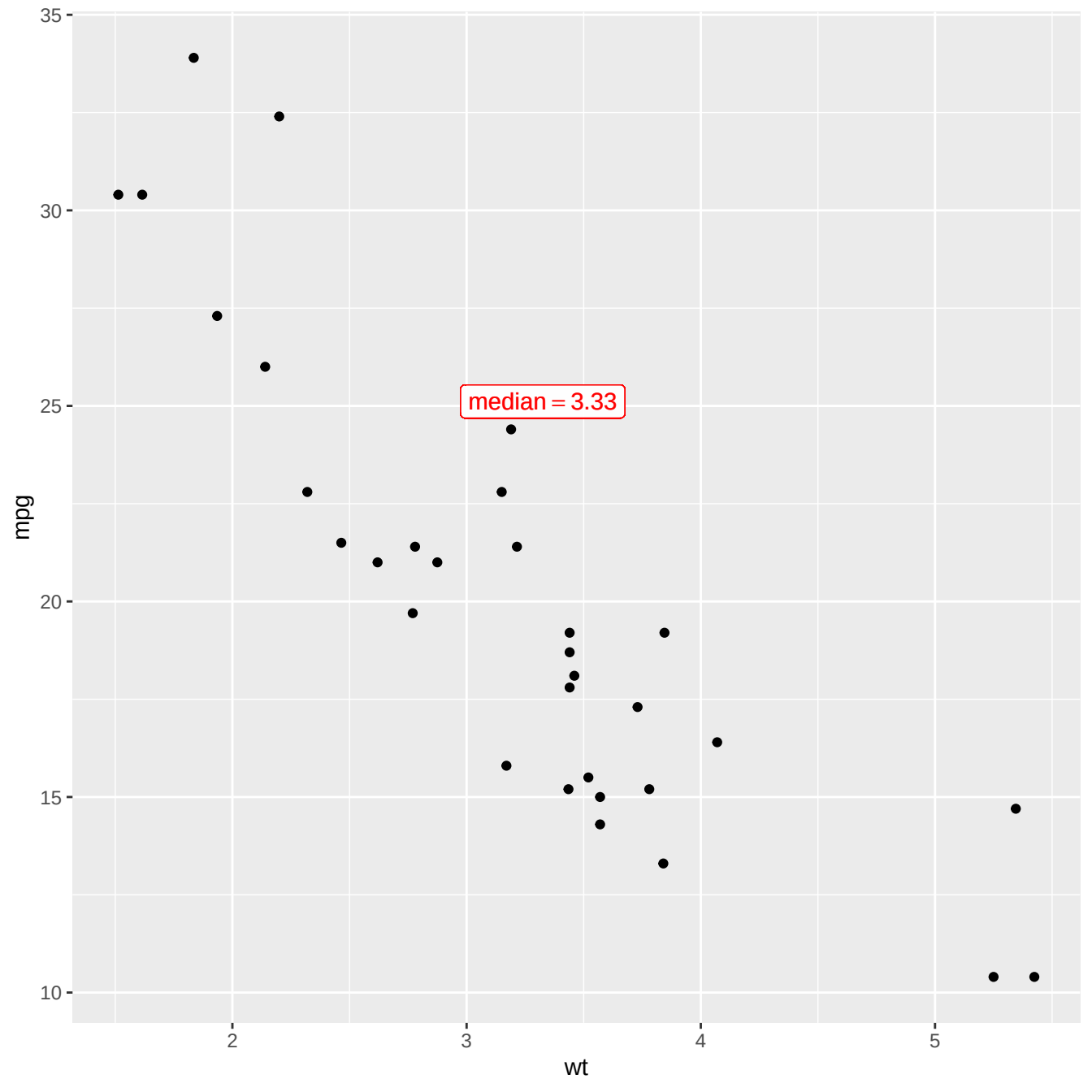


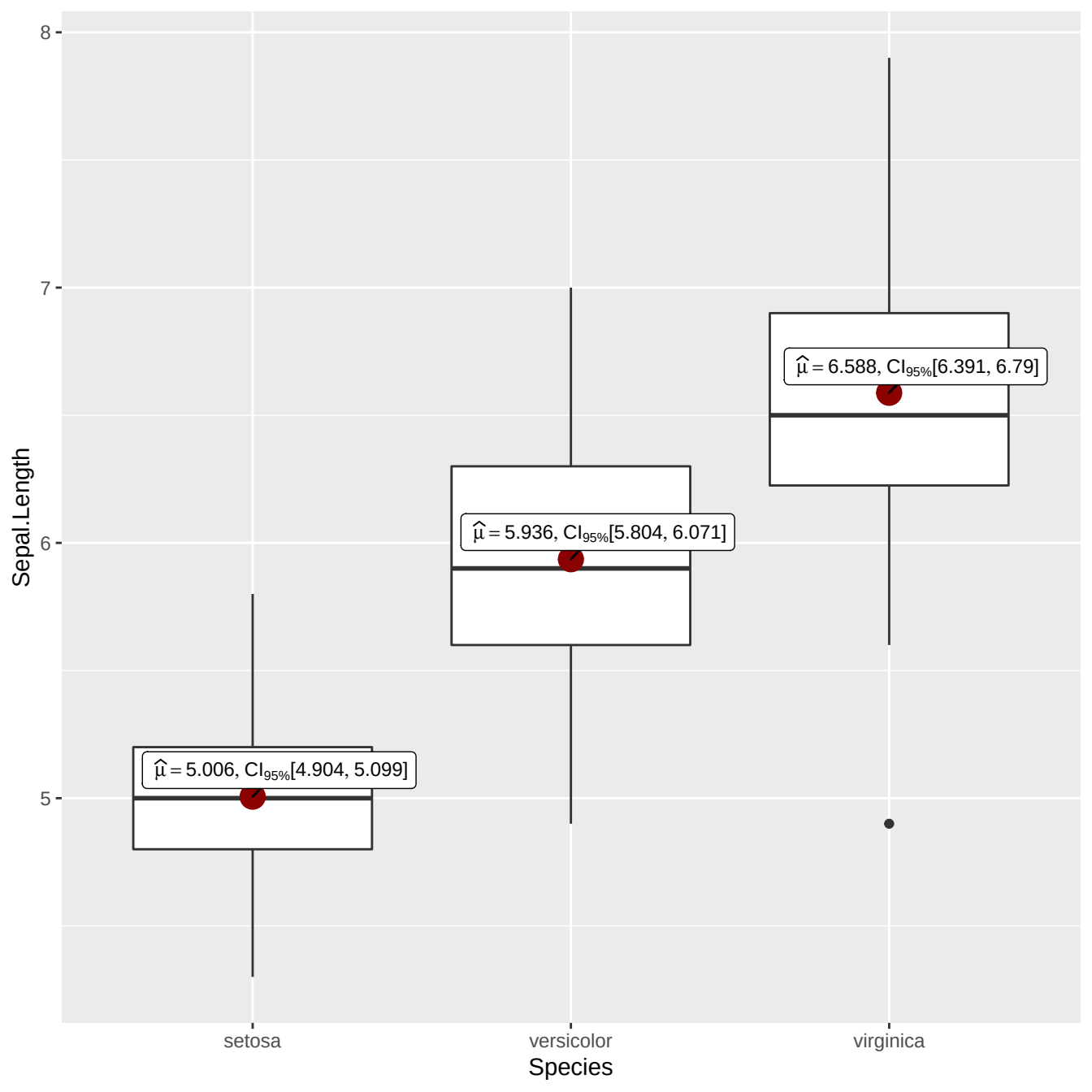


All movies have IMDB rating equal to 7.


order: 0
$t_{Student}(18) = -3.90$, $p = 0.001$, $\hat{g}_{Hedge} = -0.86$, CI
$\hat{\mu} = 0.67$
$\hat{\mu} = 0.93$
score
1.0
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0.0
text
(n = 19)
vr
(n = 19)
modality
In favor of null: $\log_e(BF_{01}) = -3.56$, $r^{JZS}_{Cauchy} = 0.71$
order: 1
$t_{Student}(14) = -1.58$, $p = 0.136$, $\hat{g}_{Hedge} = -0.39$, CI
$\hat{\mu} = 0.88$
$\hat{\mu} = 0.97$
score
text
(n = 15)
vr
(n = 15)
modality
In favor of null: $\log_e(BF_{01}) = 0.32$, $r^{JZS}_{Cauchy} = 0.71$


35
30
25
20
15
10
mpg
0
2
4
wt
mean = 3.22
test = 0


median = 3.33
mpg
wt
35
30
25
20
15
10
2
3
4
5


8
7
6
5
Sepal.Length
$\hat{\mu} = 5.006$, $CI_{95\%}[4.904, 5.099]$
$\hat{\mu} = 5.936$, $CI_{95\%}[5.804, 6.071]$
$\hat{\mu} = 6.588$, $CI_{95\%}[6.391, 6.79]$
setosa
versicolor
virginica
Species