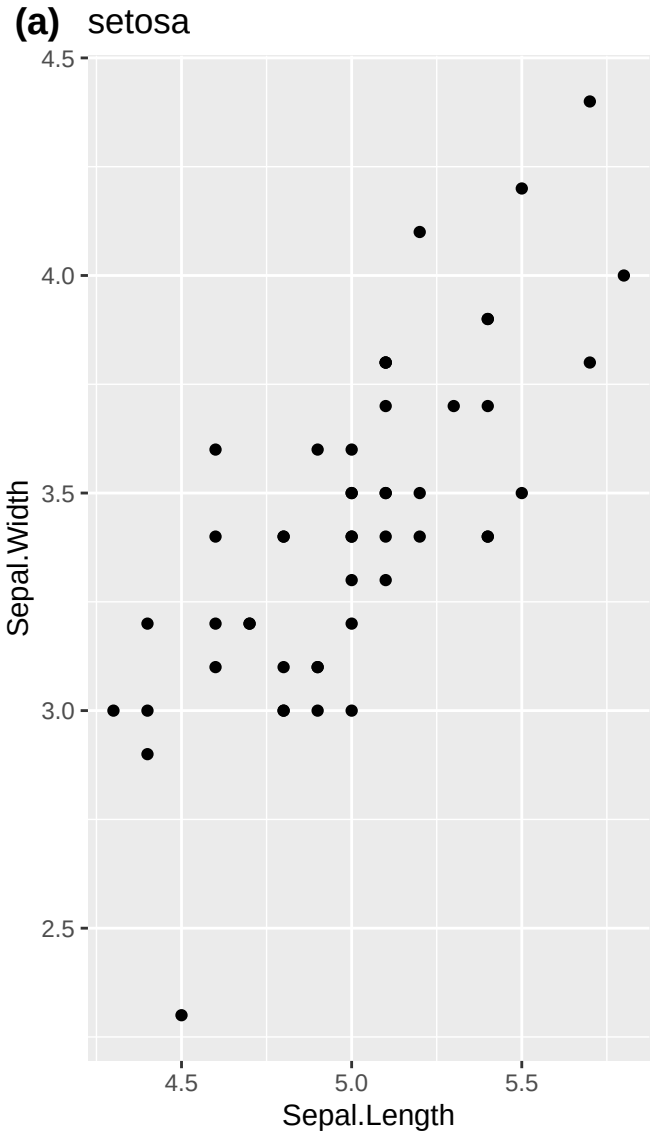
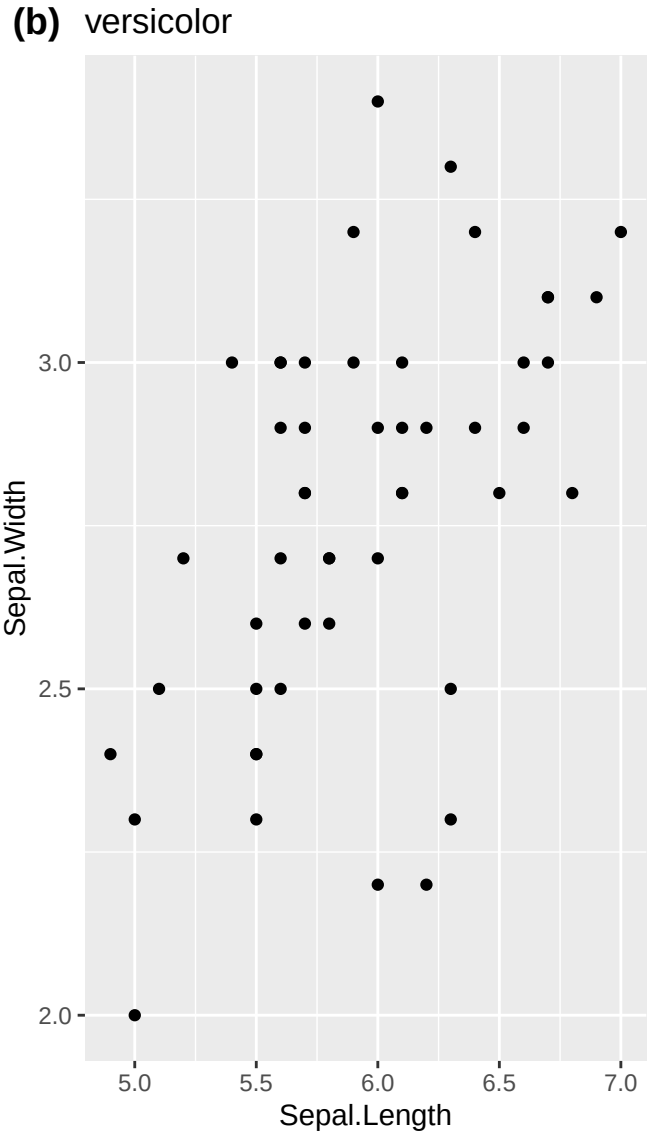
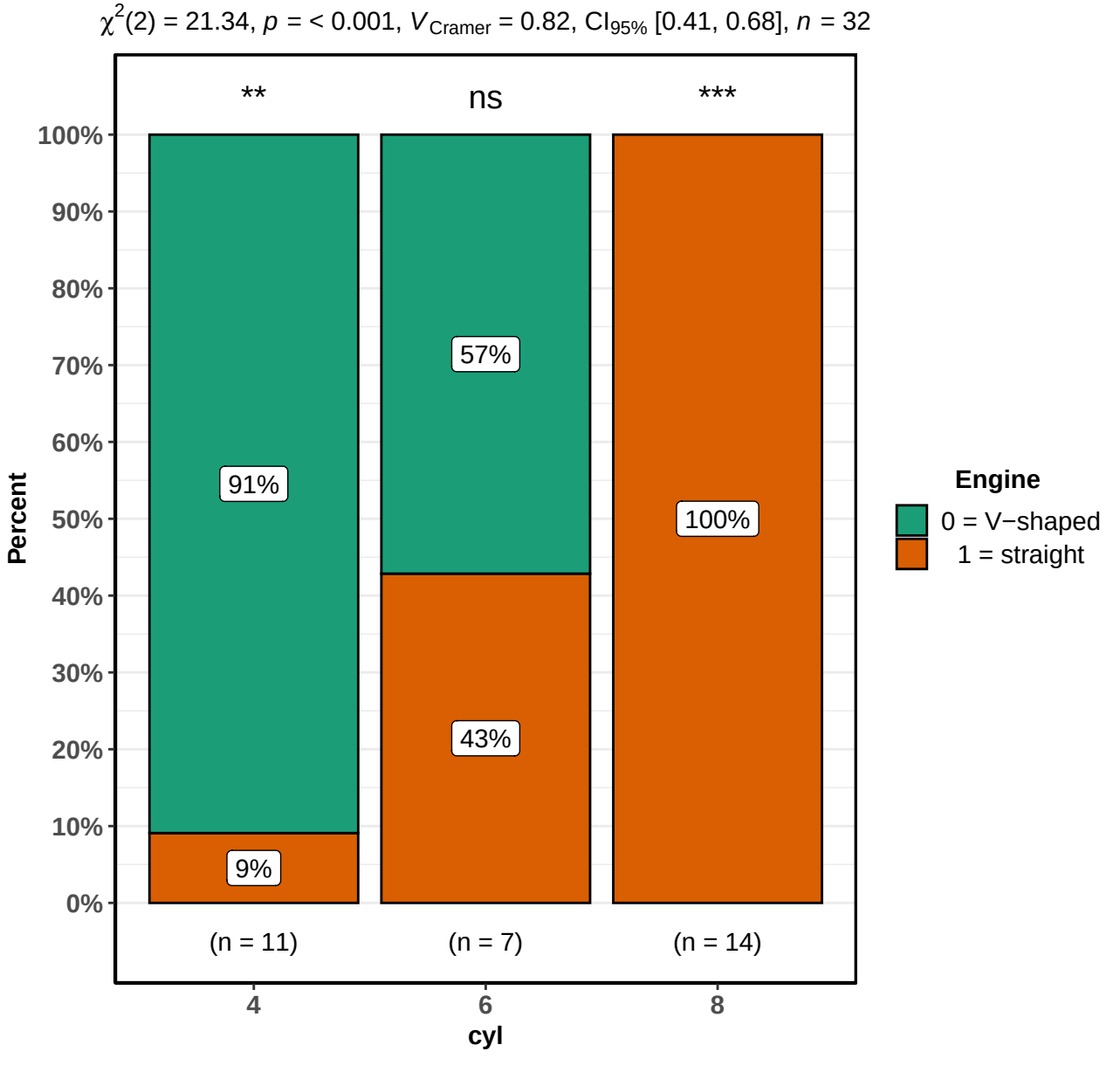
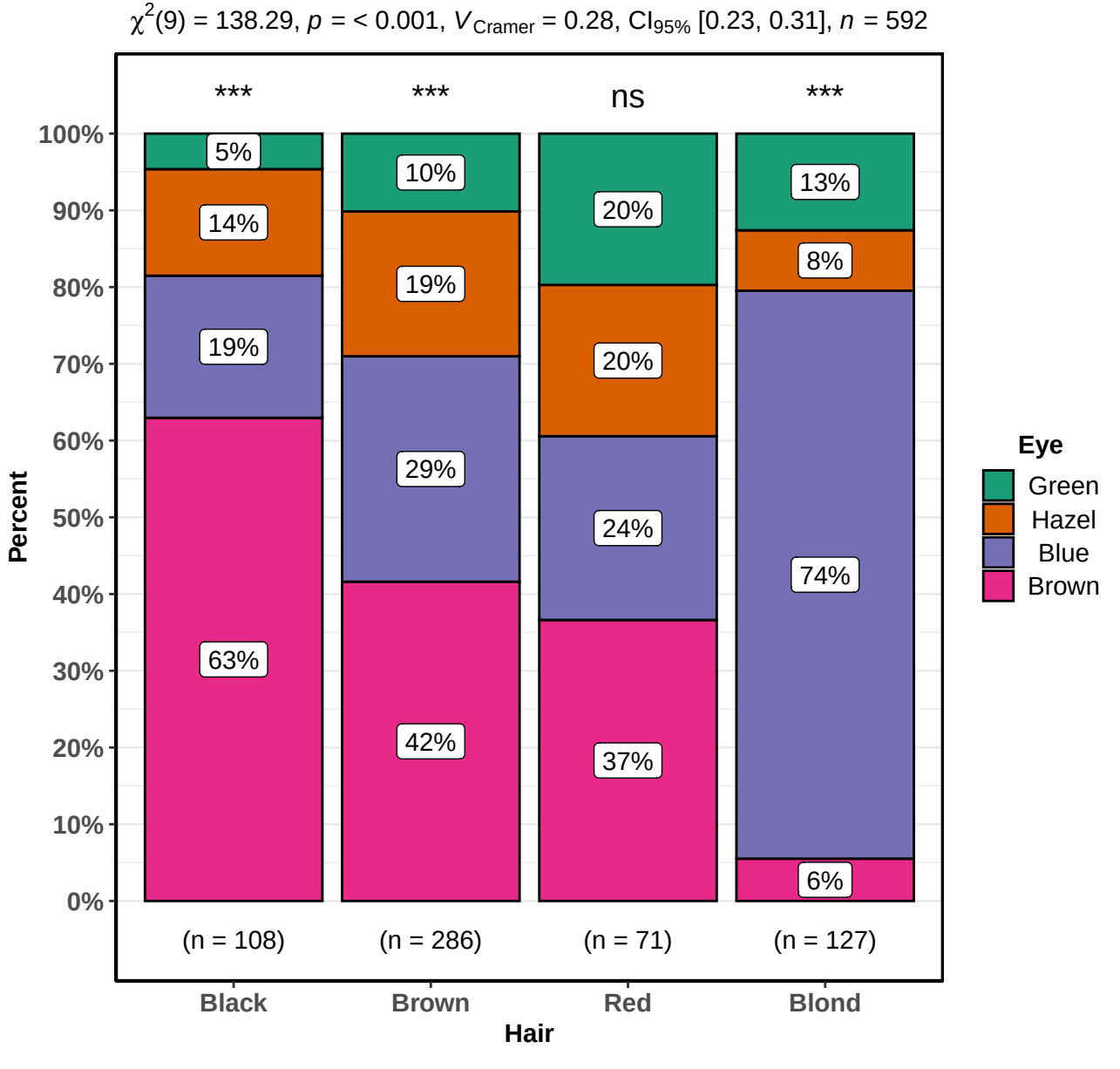
Dataset: Iris Flower dataset

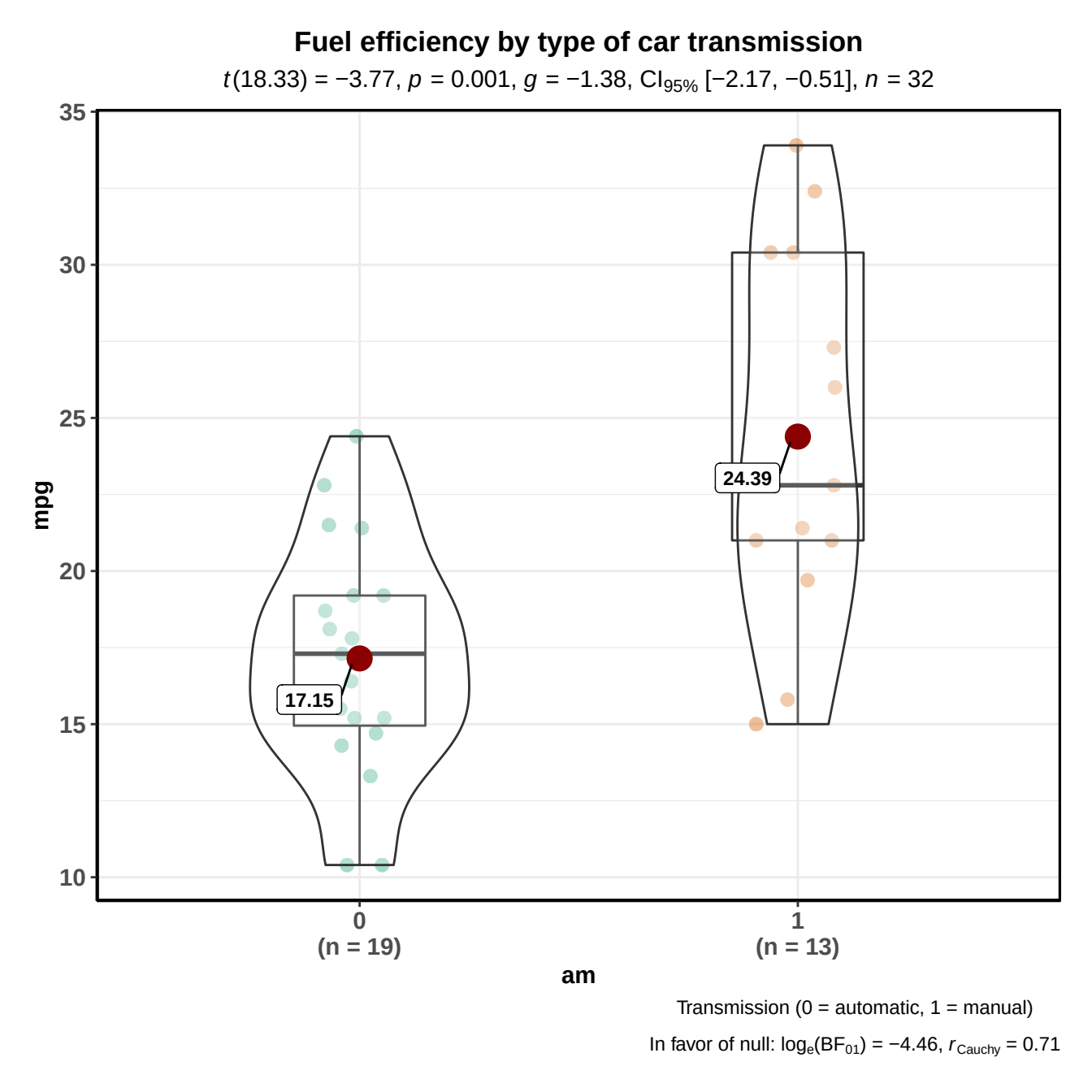


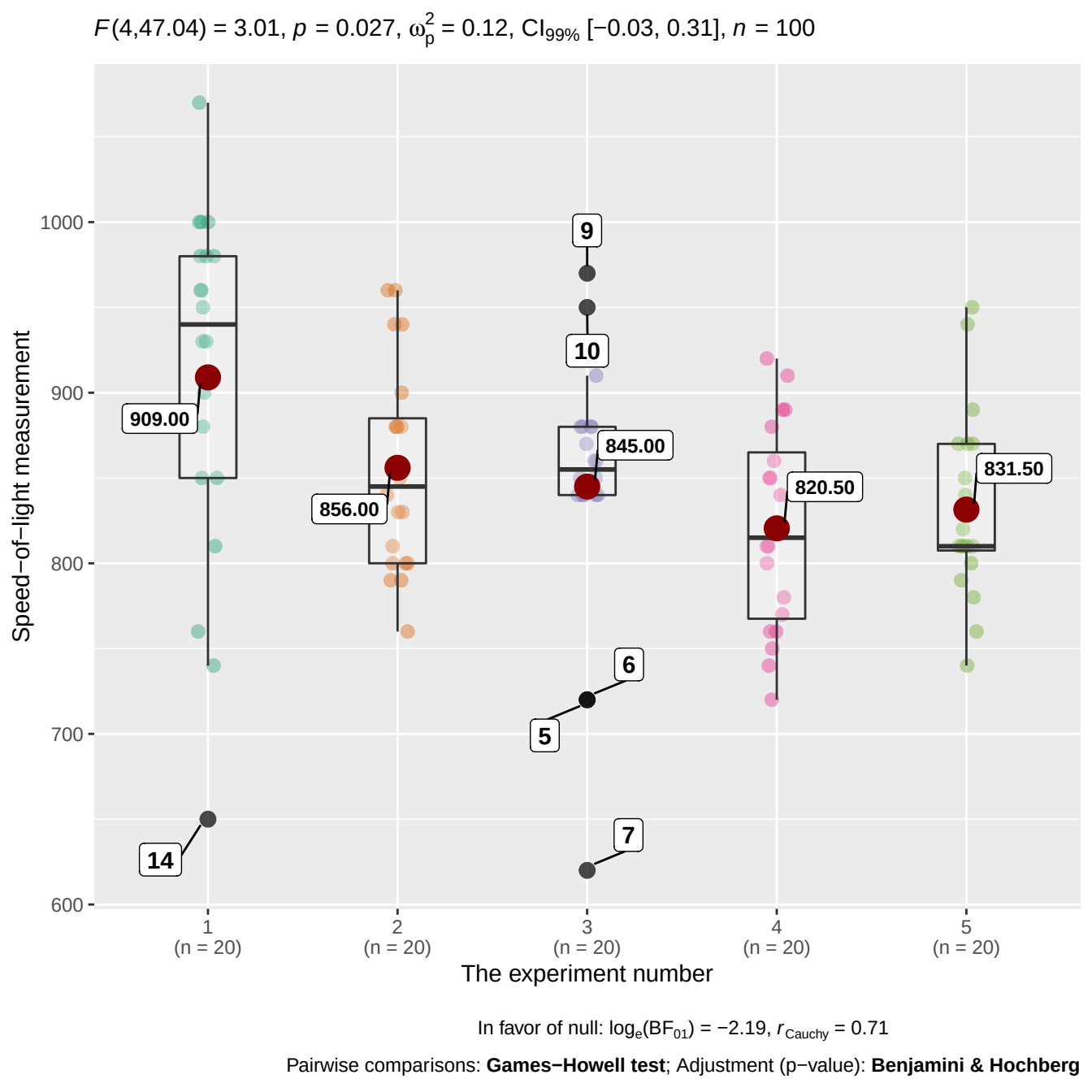


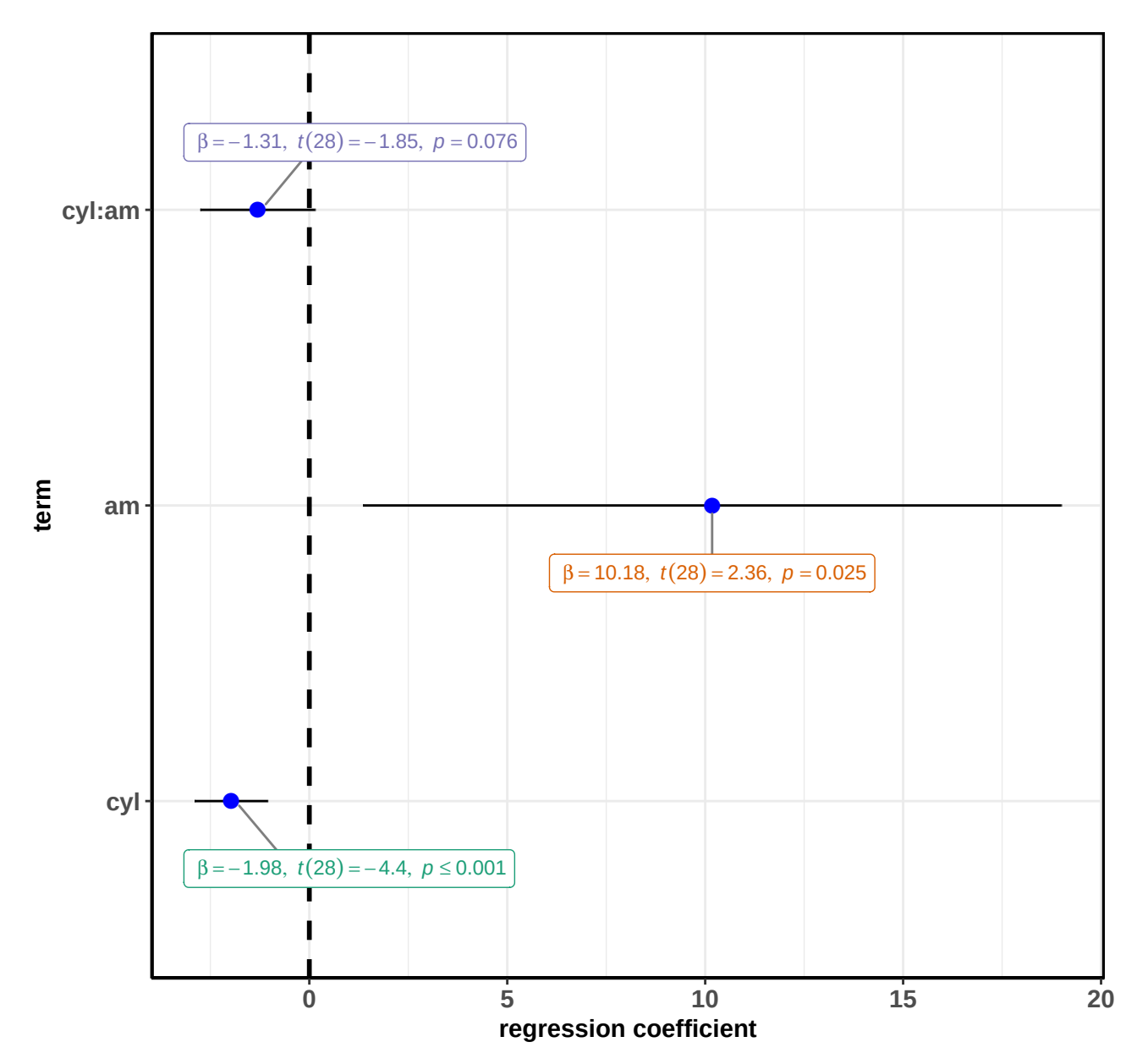
Note: Only two species of flower are displayed


$\chi^2(2) = 21.34$, $p = < 0.001$, $V_{Cramer} = 0.82$, $CI_{95\%}$ [0.41, 0.68], $n = 32$
**
ns
***
100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
Percent
91%
9%
57%
43%
100%
(n = 11)
(n = 7)
(n = 14)
4
6
8
cyl
Engine
0 = V−shaped
1 = straight
In favor of null: $\log_e(BF_{01}) = -10.86$, sampling = joint multinomial, $a = 1.00$

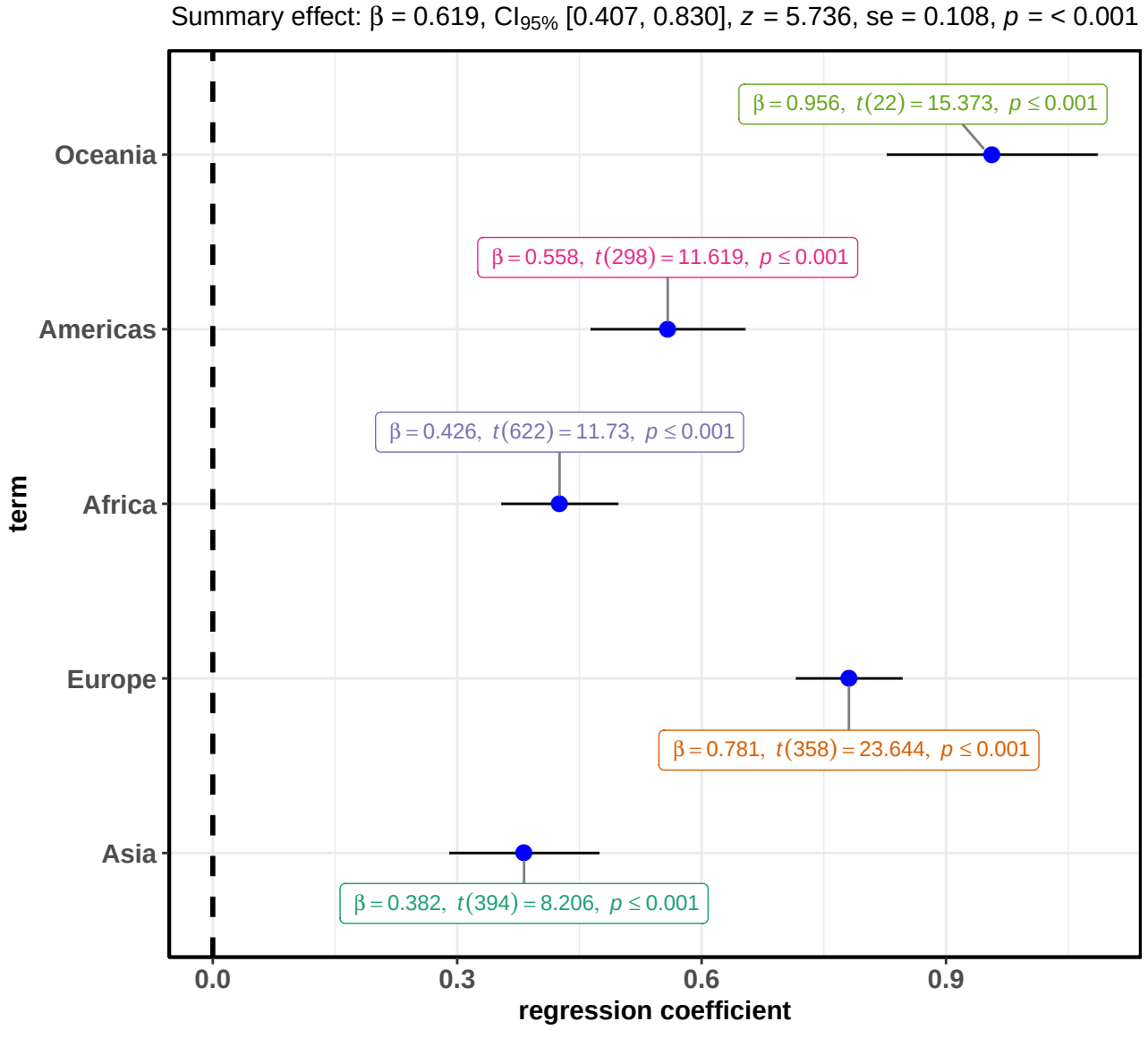

$\chi^2(9) = 138.29$, $p = < 0.001$, $V_{Cramer} = 0.28$, $CI_{95\%}$ [0.23, 0.31], $n = 592$
***
***
ns
***
100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
Percent
5%
14%
19%
63%
10%
19%
29%
42%
20%
20%
24%
37%
13%
8%
74%
6%
(n = 108)
(n = 286)
(n = 71)
(n = 127)
Black
Brown
Red
Blond
Hair
Eye
Green
Hazel
Blue
Brown
In favor of null: $\log_e(BF_{01}) = -57.51$, sampling = joint multinomial, $a = 1.00$


Fuel efficiency by type of car transmission
t(18.33) = −3.77, p = 0.001, g = −1.38, CI95% [−2.17, −0.51], n = 32
mpg
35
30
25
20
15
10
17.15
24.39
0
(n = 19)
1
(n = 13)
am
Transmission (0 = automatic, 1 = manual)
In favor of null: loge(BF01) = −4.46, rCauchy = 0.71


$F(4,47.04) = 3.01$, $p = 0.027$, $\omega_p^2 = 0.12$, $CI_{99\%}$ [−0.03, 0.31], $n = 100$
Speed−of−light measurement
1000
900
800
700
600
909.00
856.00
845.00
820.50
831.50
14
9
10
6
5
7
1
(n = 20)
2
(n = 20)
3
(n = 20)
4
(n = 20)
5
(n = 20)
The experiment number
In favor of null: $\log_e(BF_{01}) = -2.19$, $r_{Cauchy} = 0.71$
Pairwise comparisons: **Games−Howell test**; Adjustment (p−value): **Benjamini & Hochberg**

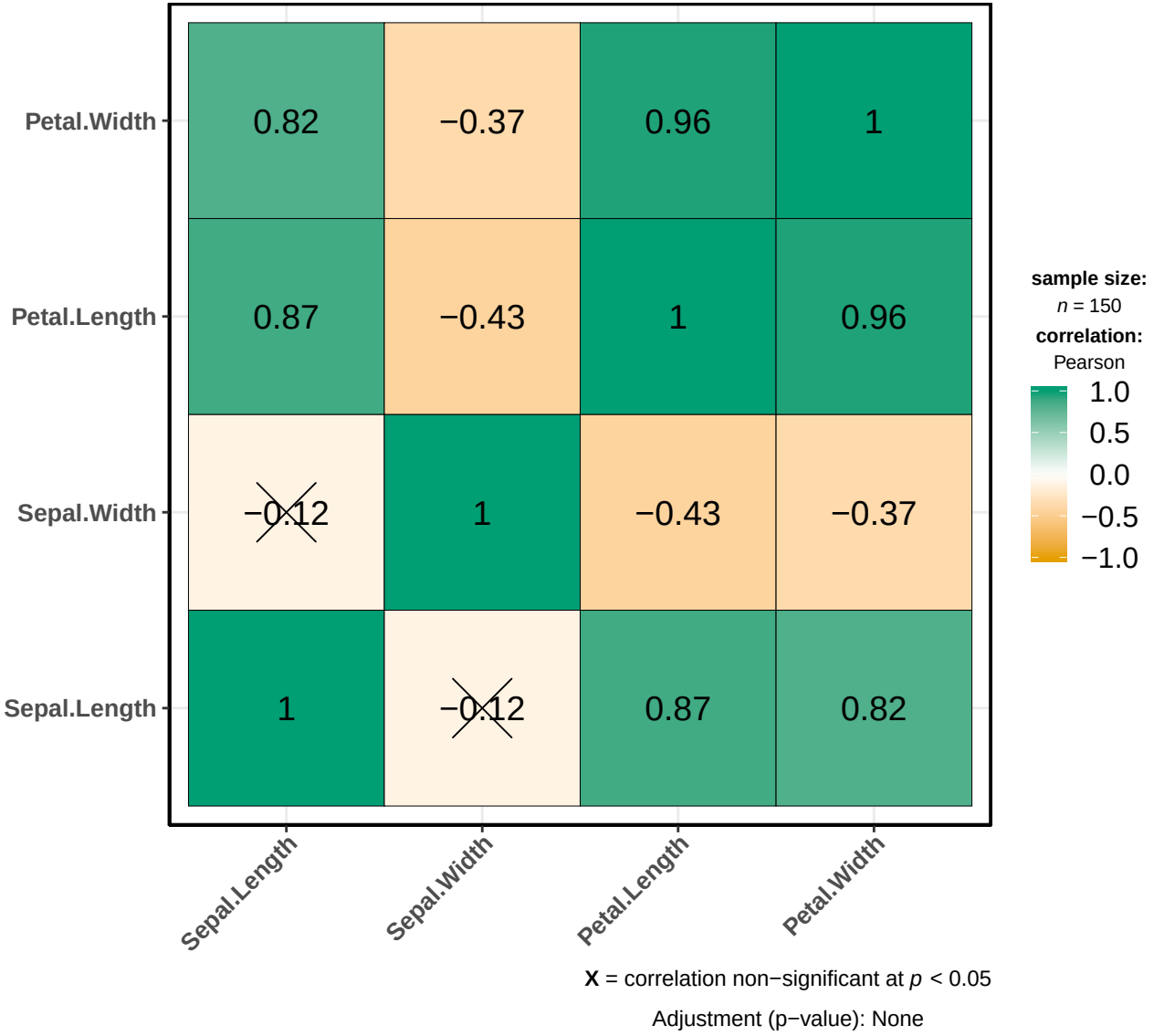


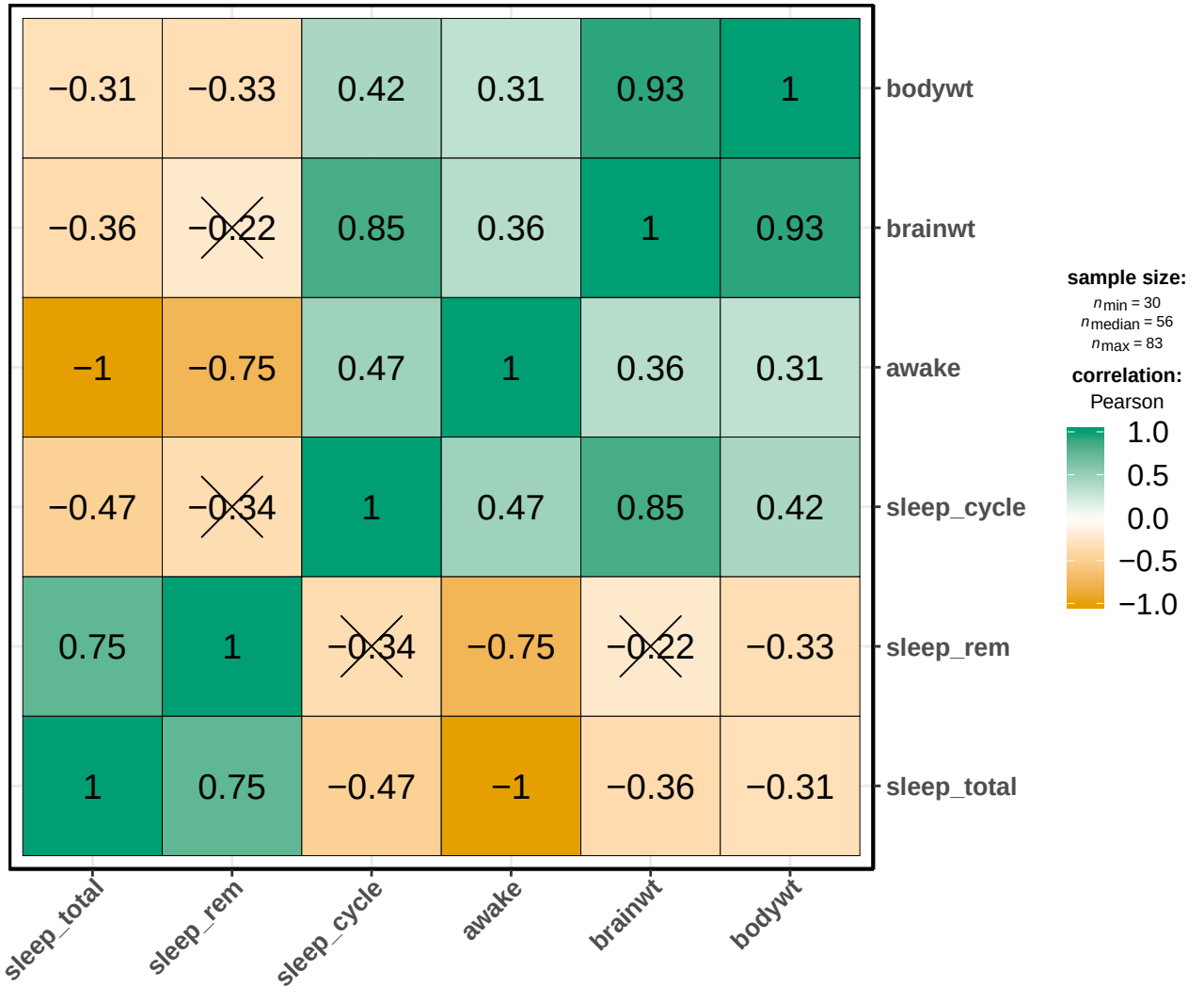
AIC = 166, BIC = 173, log−likelihood = −78

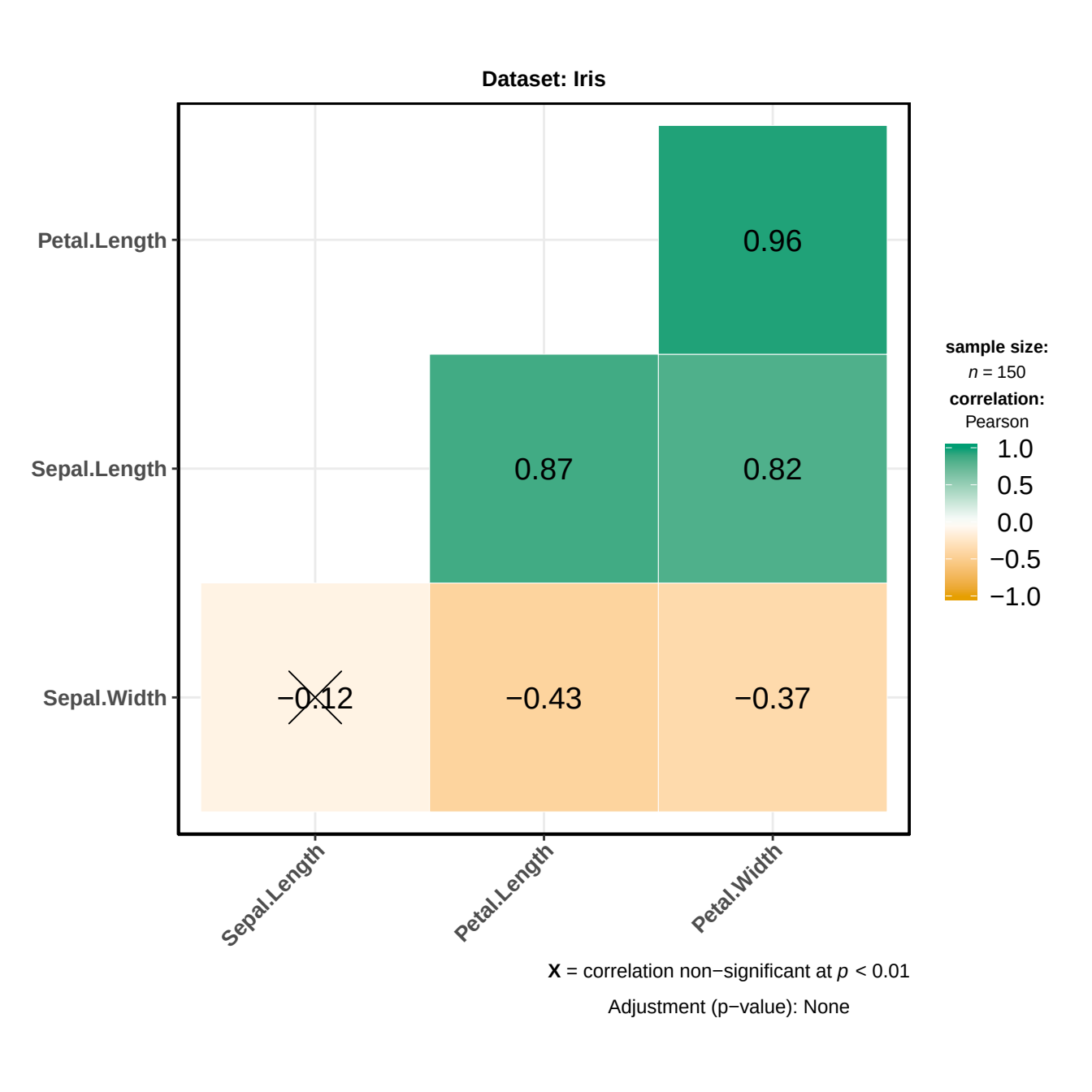


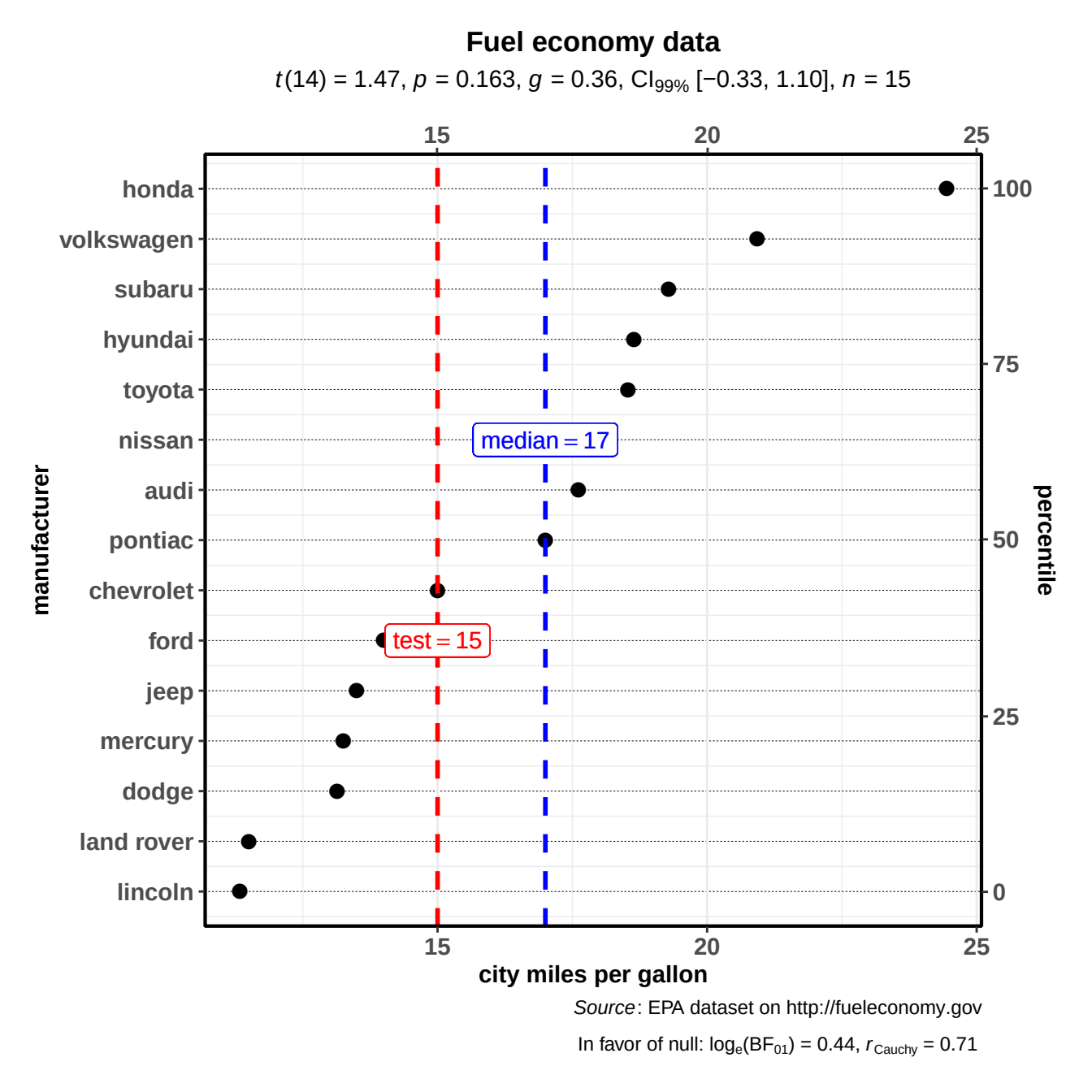
In favor of null: $\log_e(BF_{01})$ = −2.680, $d_{mean}^{posterior}$ = 0.491, $CI_{95\%}$ [0.147, 0.775]

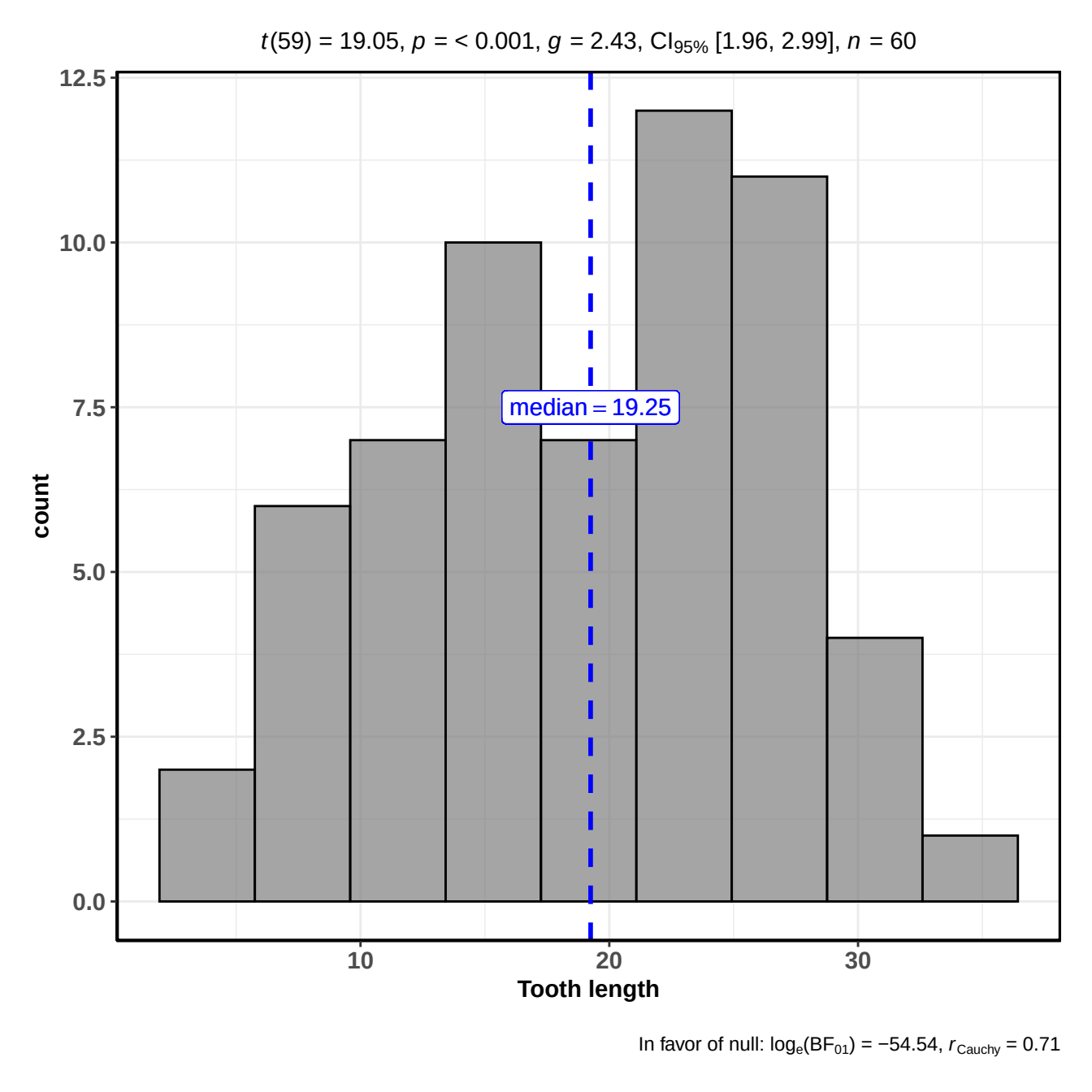
Heterogeneity: $Q(4)$ = 109, p = < 0.001, τ^2_{REML} = 0.056, I^2 = 96.81%

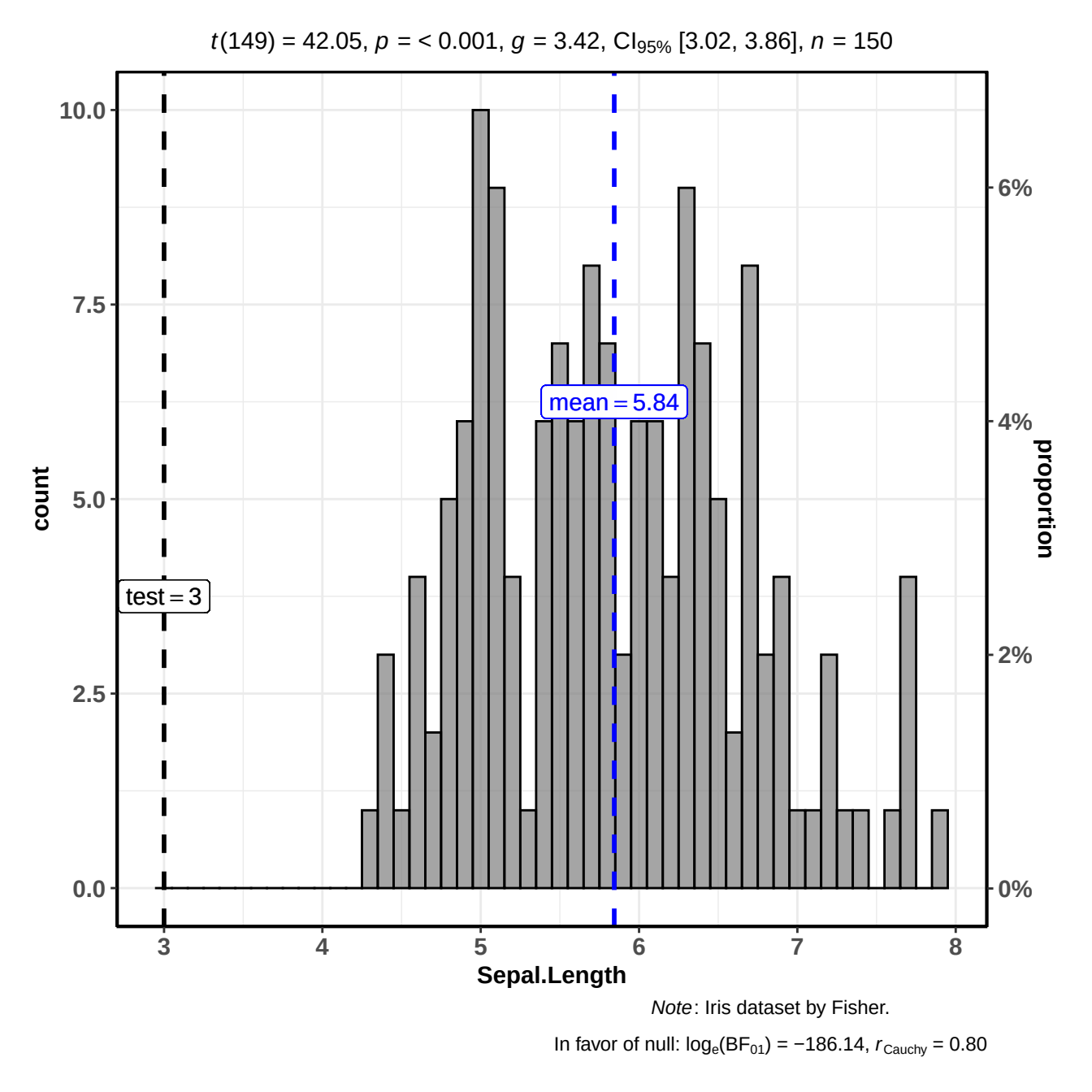

Petal.Width
Petal.Length
Sepal.Width
Sepal.Length
0.82
−0.37
0.96
1
0.87
−0.43
1
0.96
−0.12
1
−0.43
−0.37
1
−0.12
0.87
0.82
Sepal.Length
Sepal.Width
Petal.Length
Petal.Width
sample size:
n = 150
correlation:
Pearson
1.0
0.5
0.0
−0.5
−1.0
X = correlation non−significant at p < 0.05
Adjustment (p−value):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


−0.31
−0.33
0.42
0.31
0.93
1
bodywt
−0.36
−0.22
0.85
0.36
1
0.93
brainwt
−1
−0.75
0.47
1
0.36
0.31
awake
−0.47
−0.34
1
0.47
0.85
0.42
sleep_cycle
0.75
1
−0.34
−0.75
−0.22
−0.33
sleep_rem
1
0.75
−0.47
−1
−0.36
−0.31
sleep_total
sleep_total
sleep_rem
sleep_cycle
awake
brainwt
bodywt
sample size:
n_{min} = 30
n_{median} = 56
n_{max} = 83
correlation:
Pearson
1.0
0.5
0.0
−0.5
−1.0
X = correlation non−significant at p < 0.05
Adjustment (p−value): None

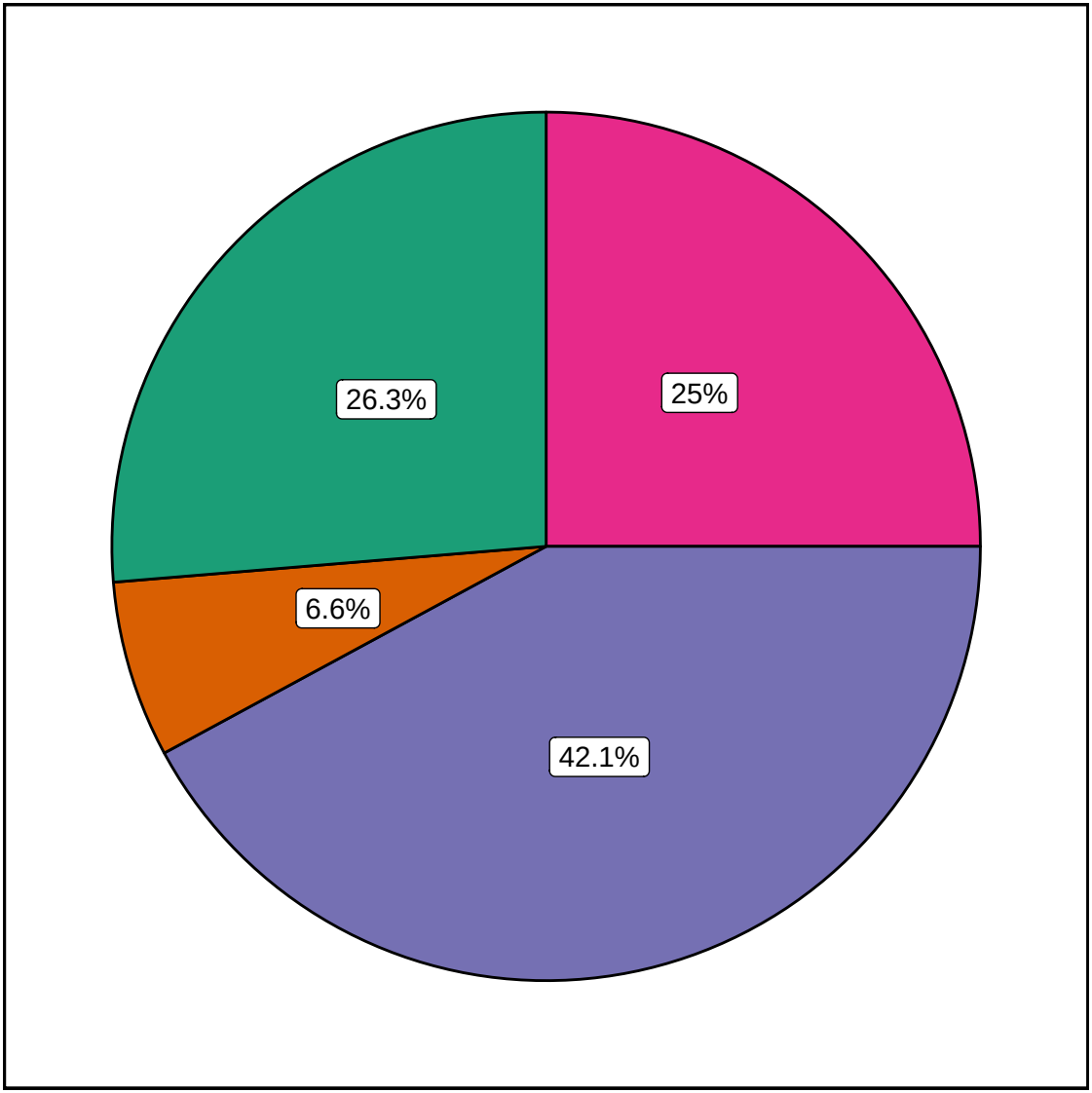

Dataset: Iris
Petal.Length
Sepal.Length
Sepal.Width
0.96
0.87
0.82
−0.12
−0.43
−0.37
Sepal.Length
Petal.Length
Petal.Width
sample size:
n = 150
correlation:
Pearson
1.0
0.5
0.0
−0.5
−1.0
X = correlation non−significant at p < 0.01
Adjustment (p−value): None


Fuel economy data
t(14) = 1.47, p = 0.163, g = 0.36, CI99% [−0.33, 1.10], n = 15
15
20
25
honda
volkswagen
subaru
hyundai
toyota
nissan
audi
pontiac
chevrolet
ford
jeep
mercury
dodge
land rover
lincoln
median = 17
test = 15
100
75
50
25
0
percentile
manufacturer
city miles per gallon
Source: EPA dataset on http://fueleconomy.gov
In favor of null: log_e(BF01) = 0.44, r_Cauchy = 0.71

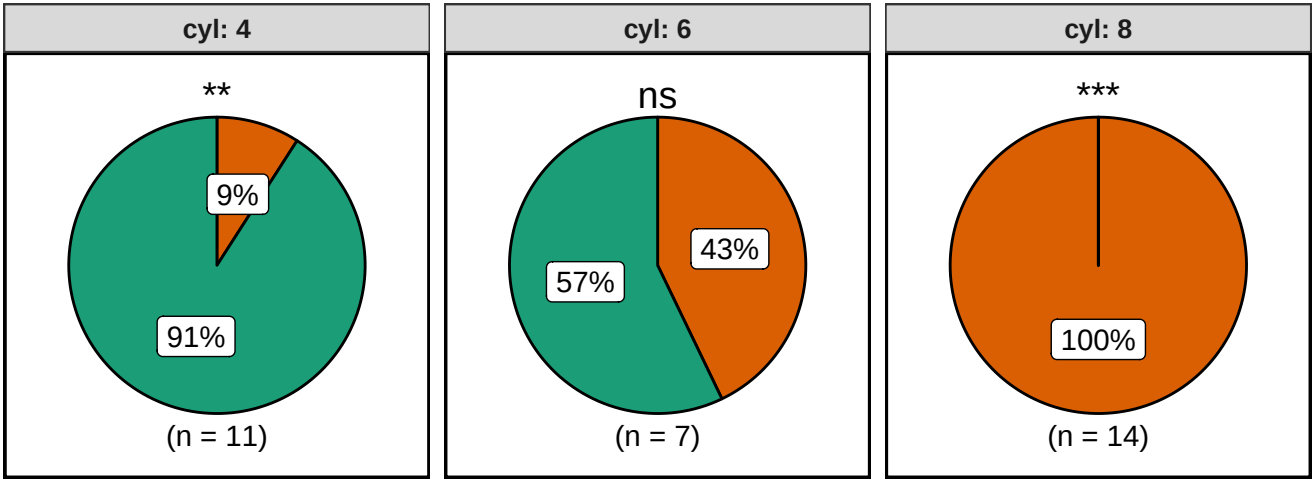

$t(59) = 19.05$, $p = < 0.001$, $g = 2.43$, $CI_{95\%}$ [1.96, 2.99], $n = 60$
12.5
10.0
7.5
5.0
2.5
0.0
count
median = 19.25
10
20
30
Tooth length
In favor of null: $\log_e(BF_{01}) = -54.54$, $r_{Cauchy} = 0.71$


$t(149) = 42.05$, $p = < 0.001$, $g = 3.42$, $CI_{95\%}$ [3.02, 3.86], $n = 150$
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: $\log_e(BF_{01}) = -186.14$, $r_{Cauchy} = 0.80$

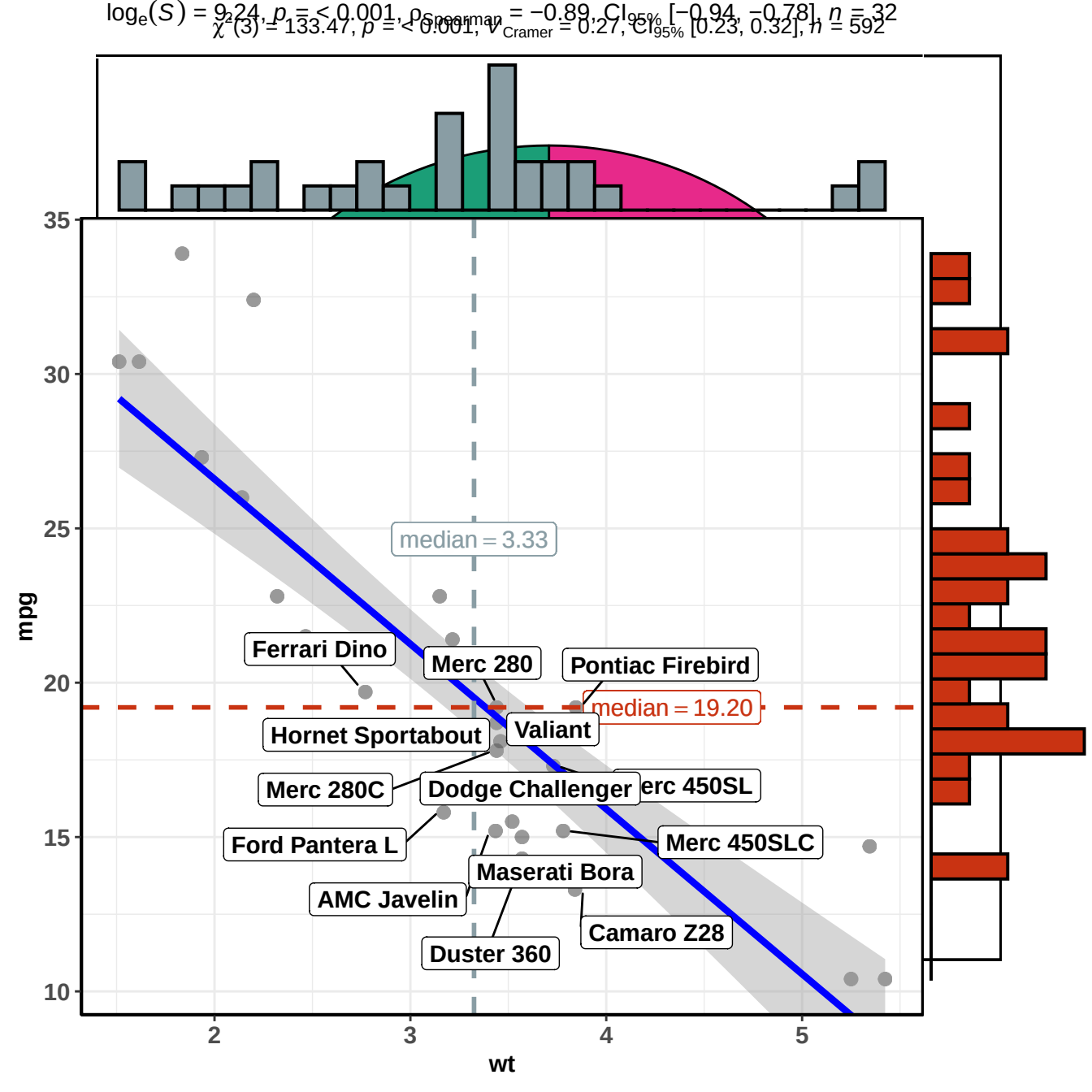
$\chi^2(3) = 19.263$, $p = < 0.001$, $V_{Cramer} = 0.291$, $CI_{95\%}$ [0.139, 0.408], $n = 76$

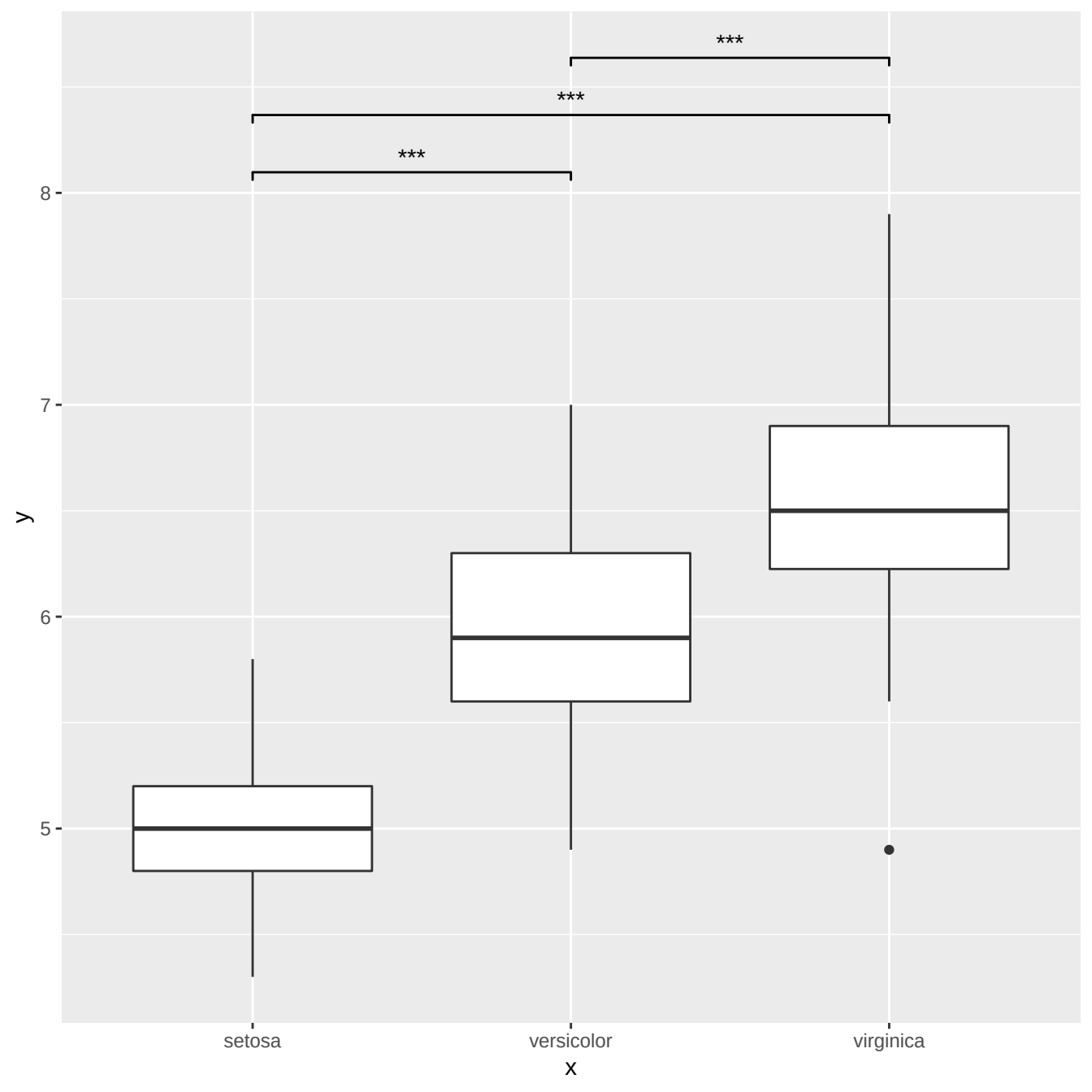


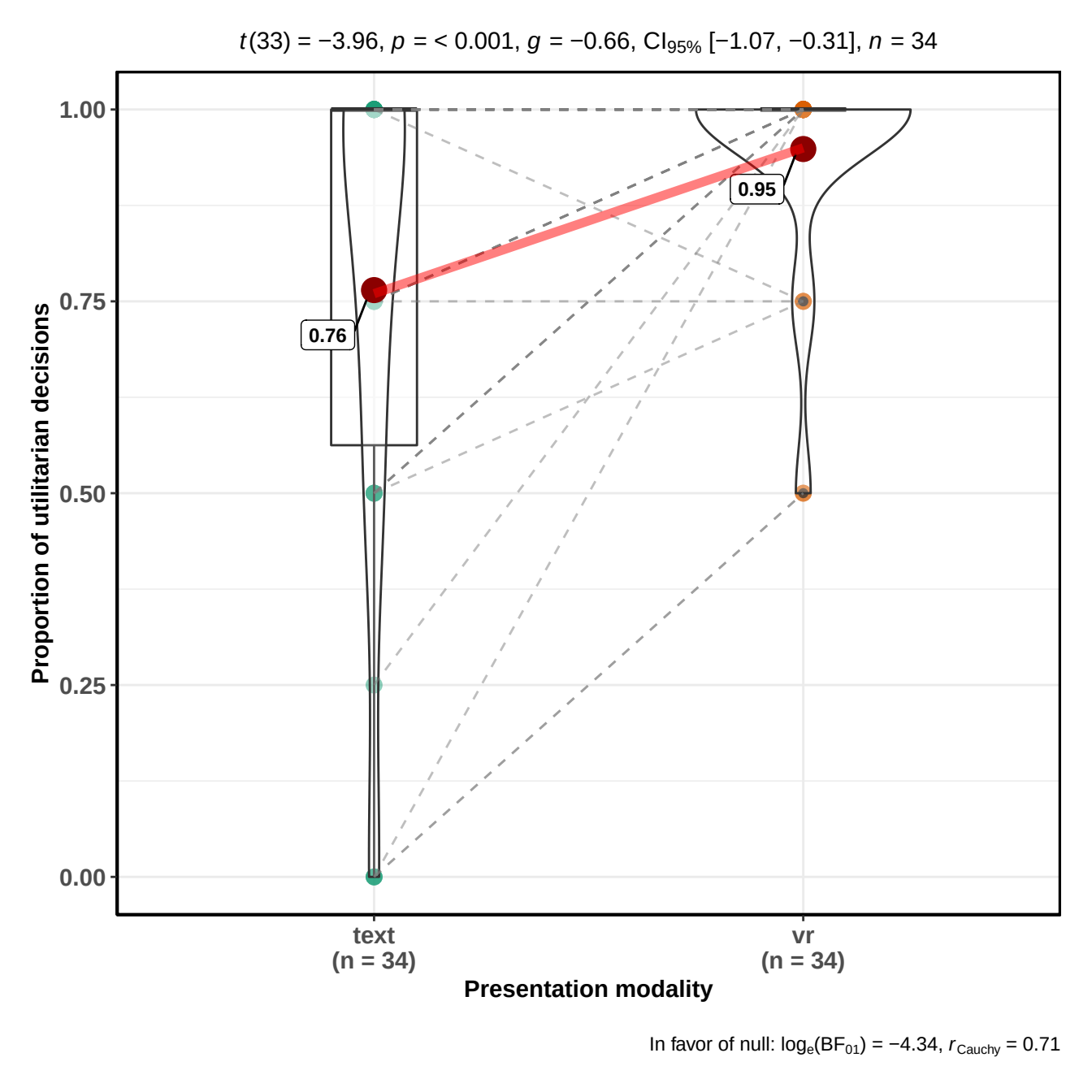
$\chi^2(2) = 21.34$, $p = < 0.001$, $V_{Cramer} = 0.82$, $CI_{95\%}$ [0.41, 0.68], $n = 32$

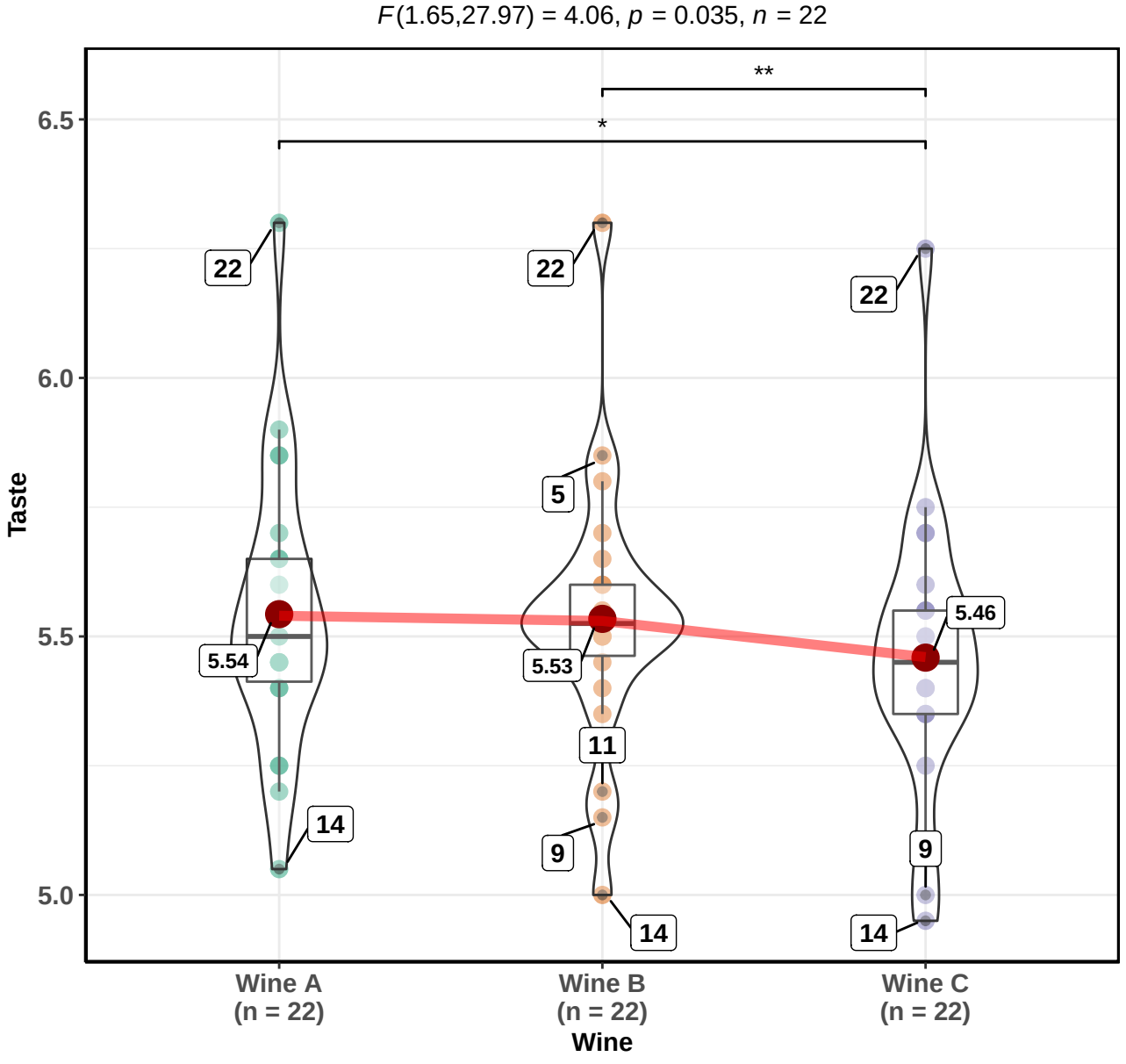


In favor of null: $\log_e(BF_{01}) = -10.31$, sampling = independent multinomial, $a = 1.00$

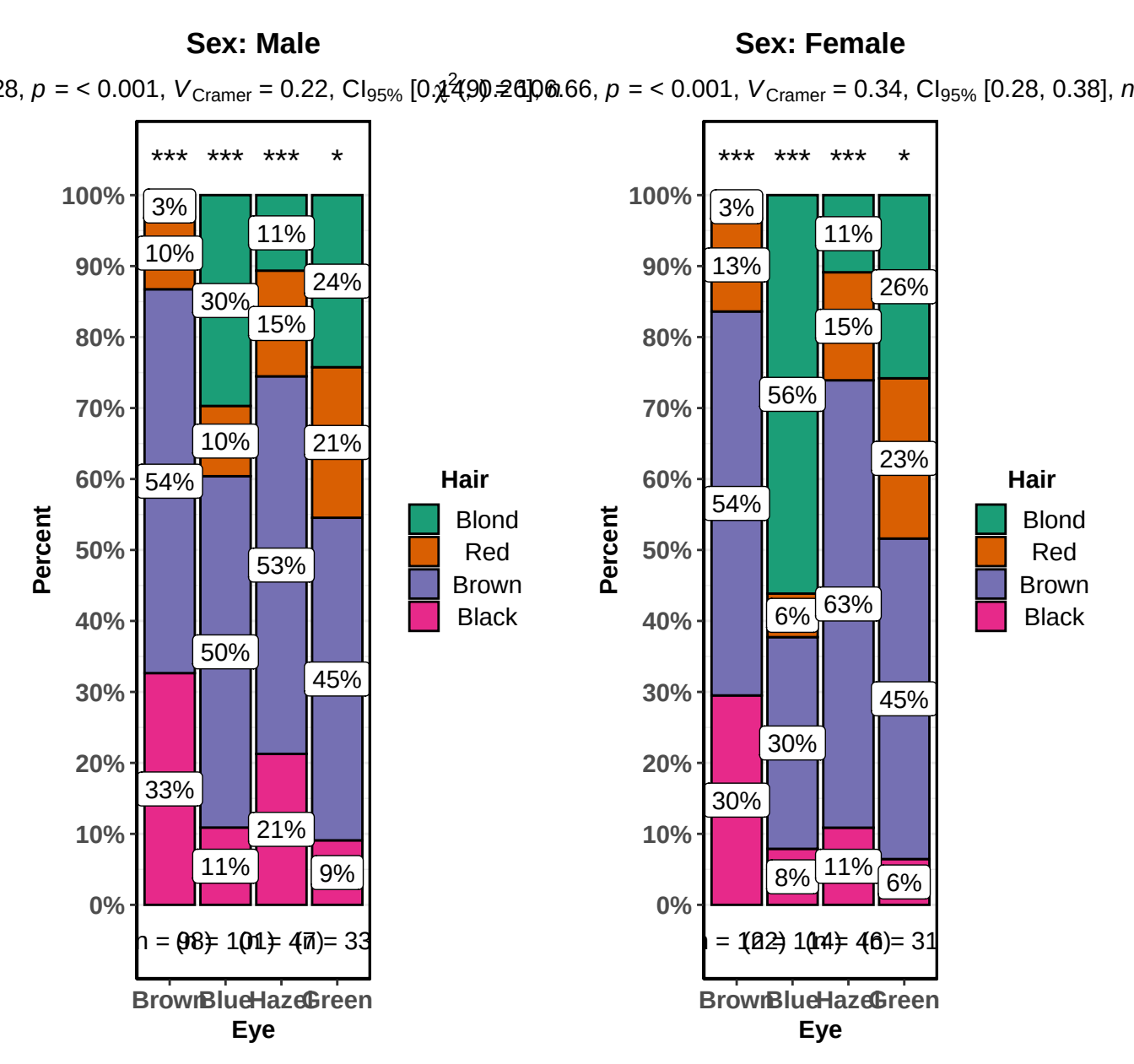

$\log_e(S) = 9.24$, $p = < 0.001$, $\rho_{Spearman} = -0.89$, $CI_{95\%}$ [−0.94, −0.78], $n = 32$
$\chi^2(3) = 133.47$, $p = < 0.001$, $V_{Cramer} = 0.27$, $CI_{95\%}$ [0.23, 0.32], $n = 592$
median = 3.33
median = 19.20
Ferrari Dino
Merc 280
Pontiac Firebird
Hornet Sportabout
Valiant
Merc 280C
Dodge Challenger
erc 450SL
Ford Pantera L
Merc 450SLC
Maserati Bora
AMC Javelin
Camaro Z28
Duster 360
mpg
wt
35
30
25
20
15
10
2
3
4
5


***
***
***
8
7
6
5
y
setosa
versicolor
virginica
x


$t(33) = -3.96$, $p = < 0.001$, $g = -0.66$, $CI_{95\%}$ [−1.07, −0.31], $n = 34$
1.00
0.75
0.50
0.25
0.00
Proportion of utilitarian decisions
0.76
0.95
text
(n = 34)
vr
(n = 34)
Presentation modality
In favor of null: $\log_e(BF_{01}) = -4.34$, $r_{Cauchy} = 0.71$

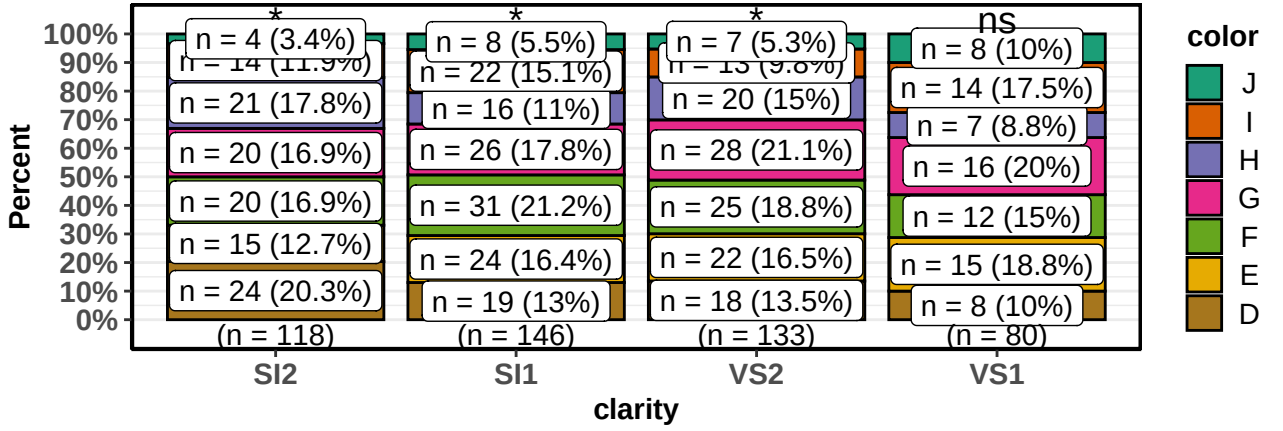


Pairwise comparisons: **Yuen's trimmed means test**; Adjustment (p−value): **Holm**


Sex: Male
28, p = < 0.001, V Cramer = 0.22, CI95% [0.14, 0.31], n
Sex: Female
χ²(9) = 206.66, p = < 0.001, V Cramer = 0.34, CI95% [0.28, 0.38], n
***
***
***
*
100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
Percent
3%
10%
54%
33%
11%
30%
10%
50%
21%
11%
11%
15%
53%
21%
24%
21%
45%
9%
3%
13%
54%
30%
11%
56%
6%
30%
8%
11%
26%
15%
63%
23%
45%
6%
Brown
Blue
Hazel
Green
Eye
Hair
Blond
Red
Brown
Black
14, sampling = joint multinomial, a = 1.00
null: log_e(BF_01) = −42.65, sampling = joint multinomial, a = 1.00

Quality: Very Good

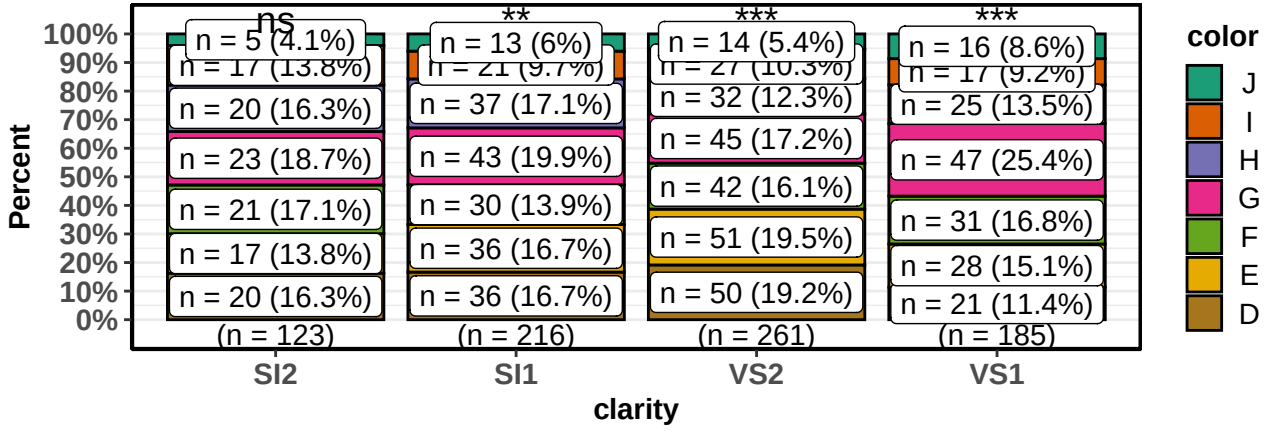
$\chi^2(18) = 17.95$, $p = 0.459$, $V_{Cramer} = 0.11$, $CI_{95\%}$ [0.02, 0.11], $n = 477$



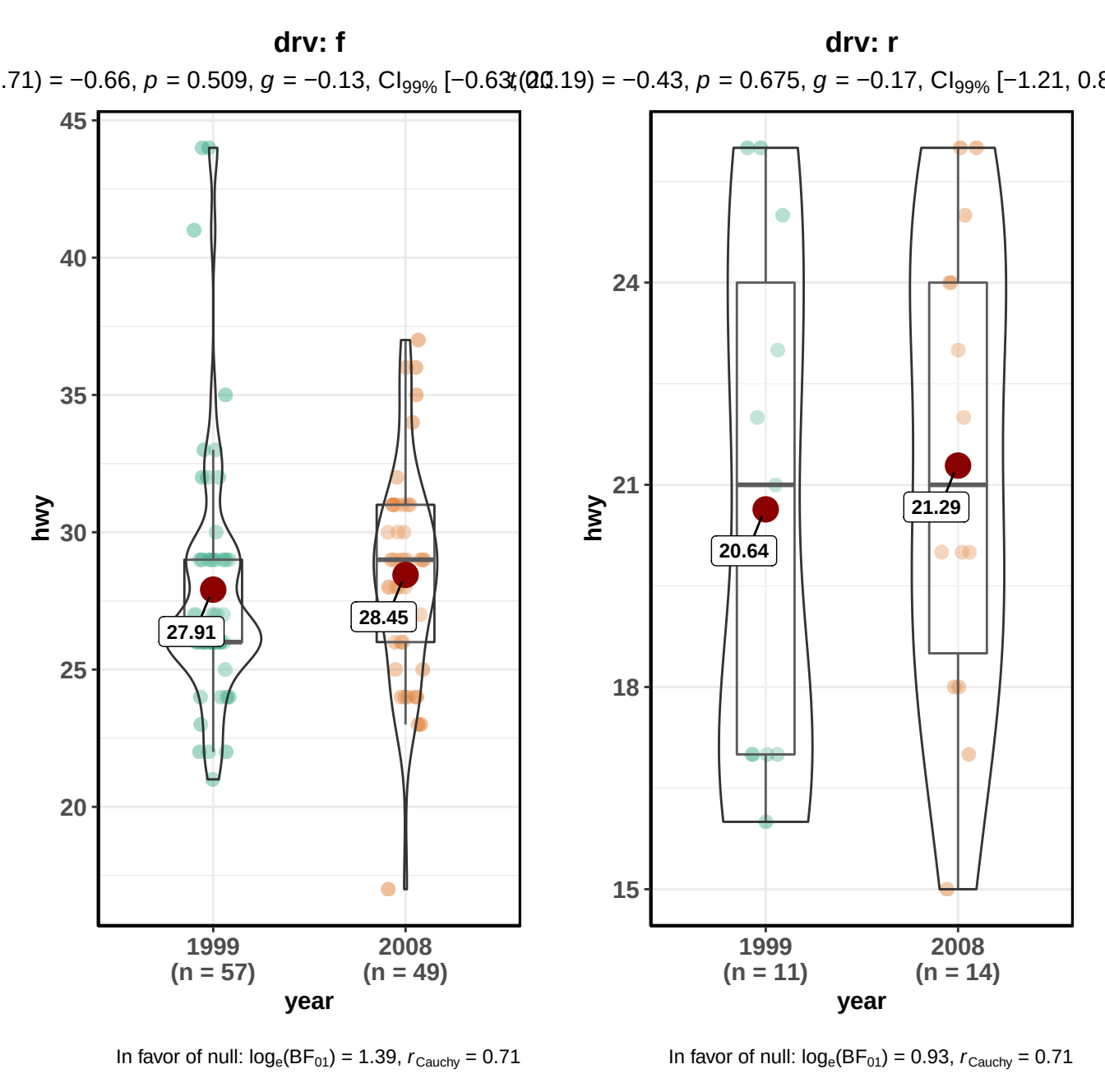
In favor of null: $\log_e(BF_{01}) = 4.95$, sampling = poisson, $a = 1.00$

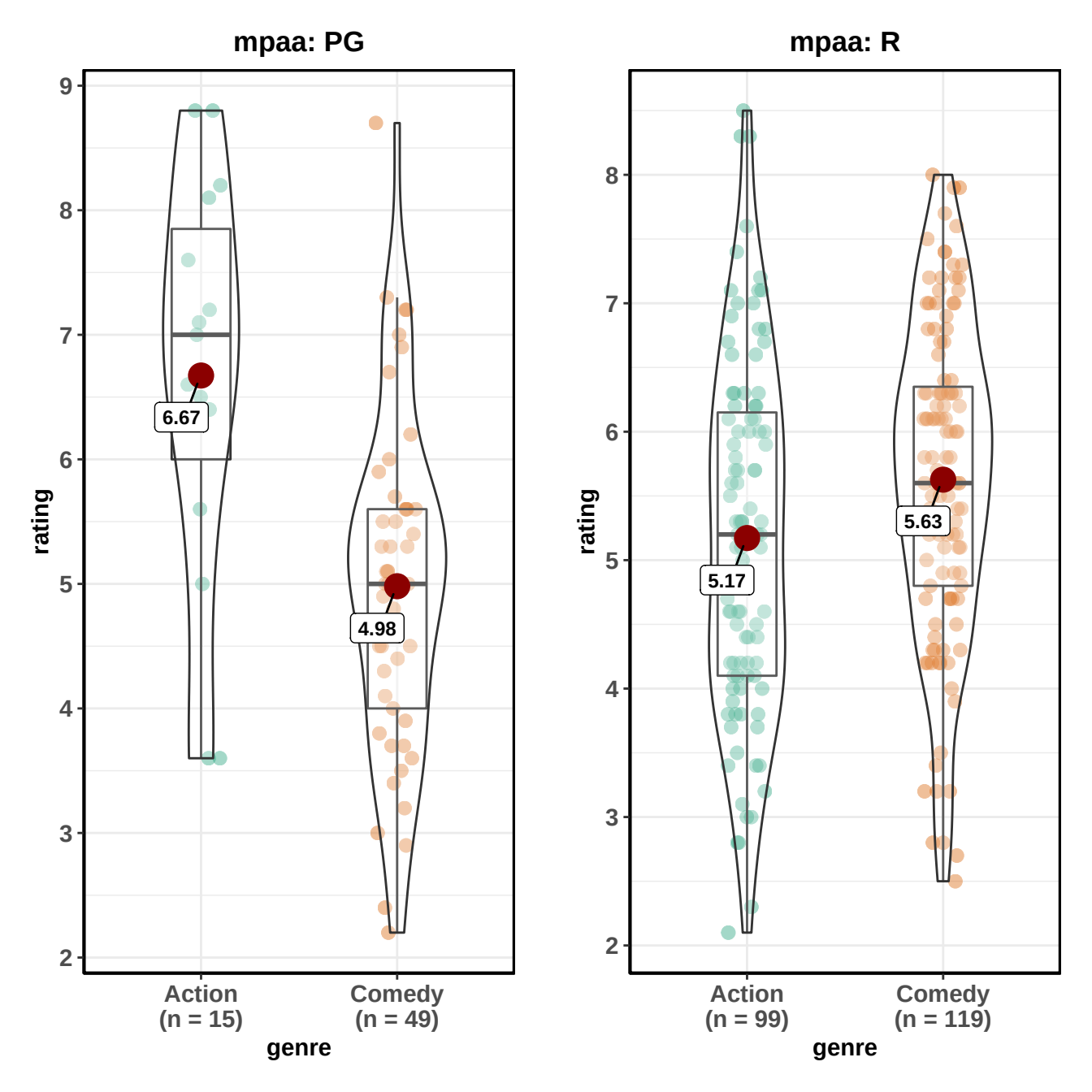
Quality: Ideal

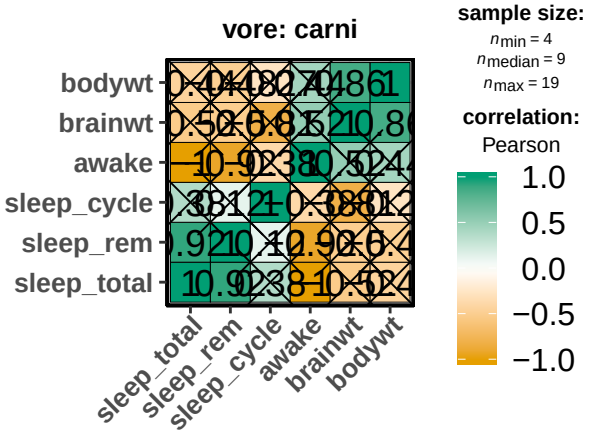
$\chi^2(18) = 17.85$, $p = 0.466$, $V_{Cramer} = 0.09$, $CI_{95\%}$ [0.02, 0.08], $n = 785$



In favor of null: $\log_e(BF_{01}) = 9.05$, sampling = poisson, $a = 1.00$

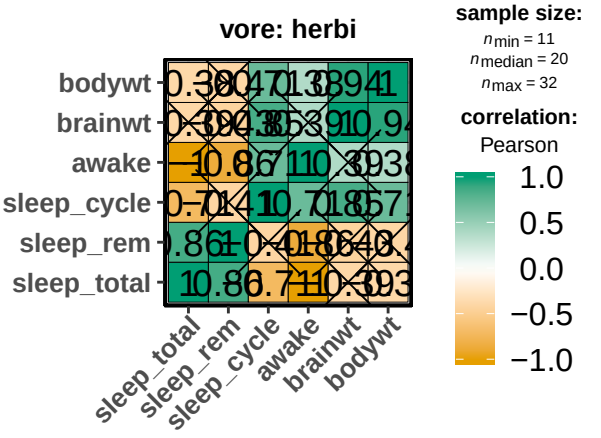

drv: f
.71) = −0.66, p = 0.509, g = −0.13, CI99% [−0.63, 0.
t(20.19) = −0.43, p = 0.675, g = −0.17, CI99% [−1.21, 0.8
drv: r
hwy
45
40
35
30
25
20
27.91
28.45
1999
(n = 57)
2008
(n = 49)
year
hwy
24
21
18
15
20.64
21.29
1999
(n = 11)
2008
(n = 14)
year
In favor of null: log_e(BF01) = 1.39, r_Cauchy = 0.71
In favor of null: log_e(BF01) = 0.93, r_Cauchy = 0.71


mpaa: PG
mpaa: R
rating
genre
Action
(n = 15)
Comedy
(n = 49)
Action
(n = 99)
Comedy
(n = 119)
6.67
4.98
5.17
5.63



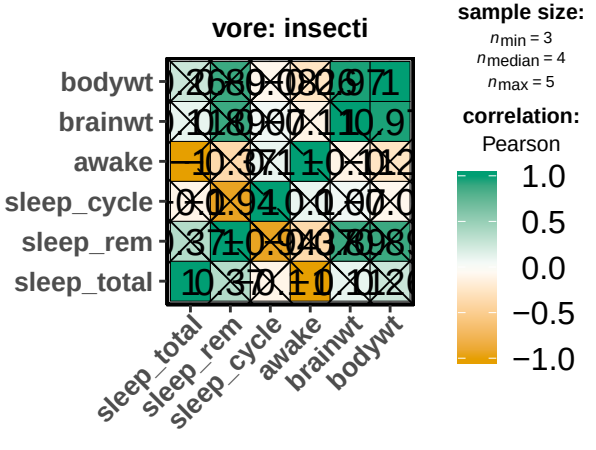
X = correlation non−significant at $p < 0.05$

Adjustment (p−value): None



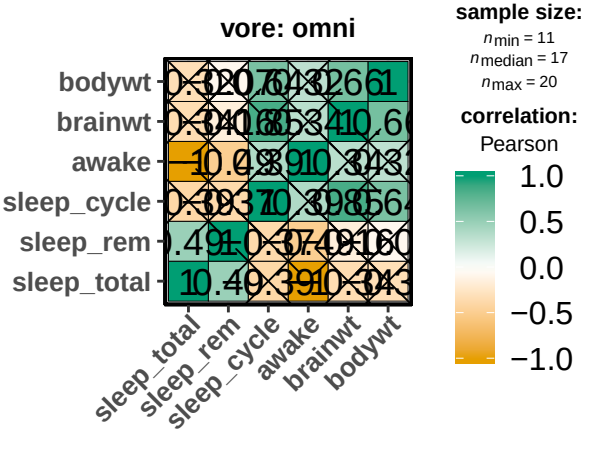
X = correlation non−significant at $p < 0.05$

Adjustment (p−value): None



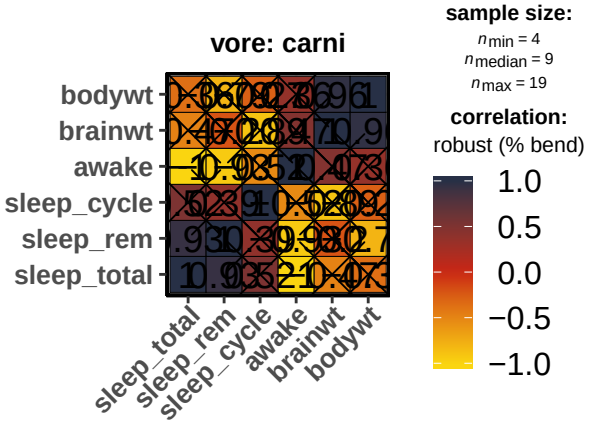
X = correlation non−significant at $p < 0.05$

Adjustment (p−value): None



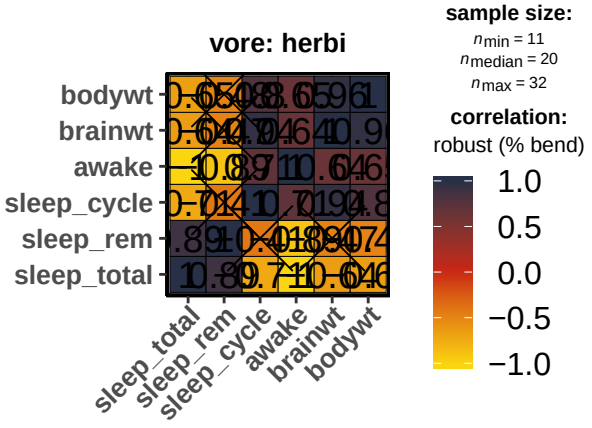
X = correlation non−significant at $p < 0.05$

Adjustment (p−value): None



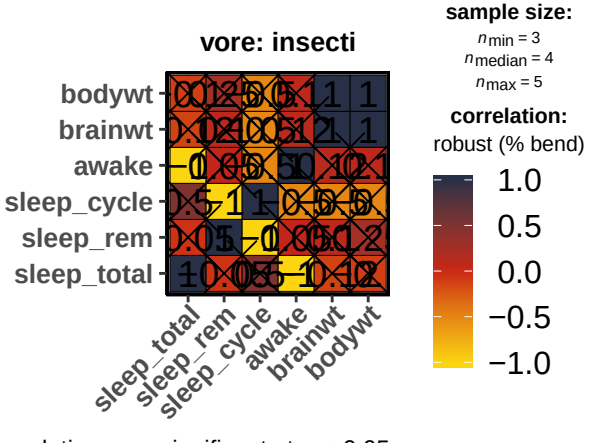
= correlation non−significant at $p < 0.05$

Adjustment (p−value): Holm



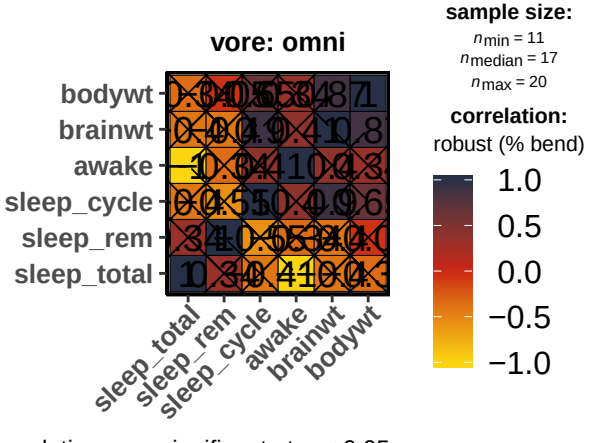
X = correlation non−significant at $p < 0.05$

Adjustment (p−value): Holm



= correlation non−significant at $p < 0.05$

Adjustment (p−value): Holm

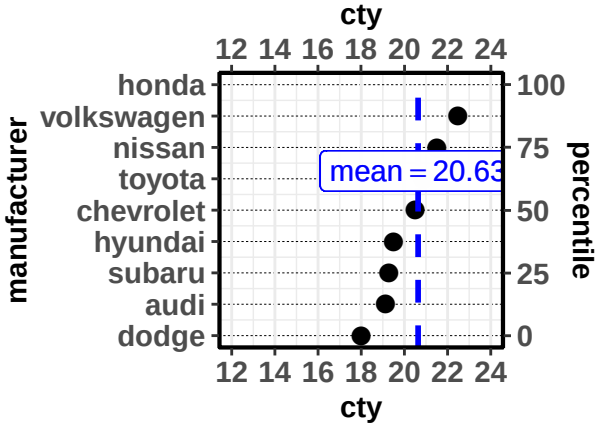


X = correlation non−significant at $p < 0.05$

Adjustment (p−value): Holm

cylinder count: 4

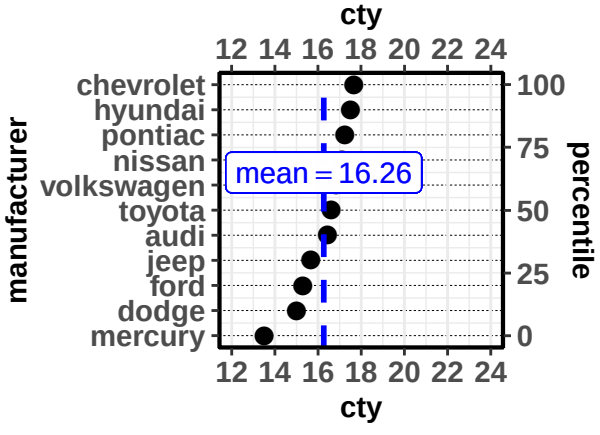
$t(8) = 7.82$, $p = < 0.001$, $g = 2.32$, $CI_{95\%}$ [1.25, 4.25



In favor of null: $\log_e(BF_{01}) = -6.20$, $r_{Cauchy} = 0.71$

cylinder count: 6

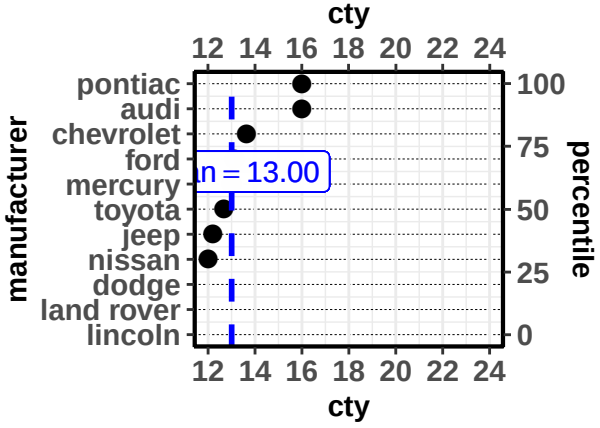
$t(10) = 1.99$, $p = 0.075$, $g = 0.55$, $CI_{95\%}$ [−0.06, 1.29



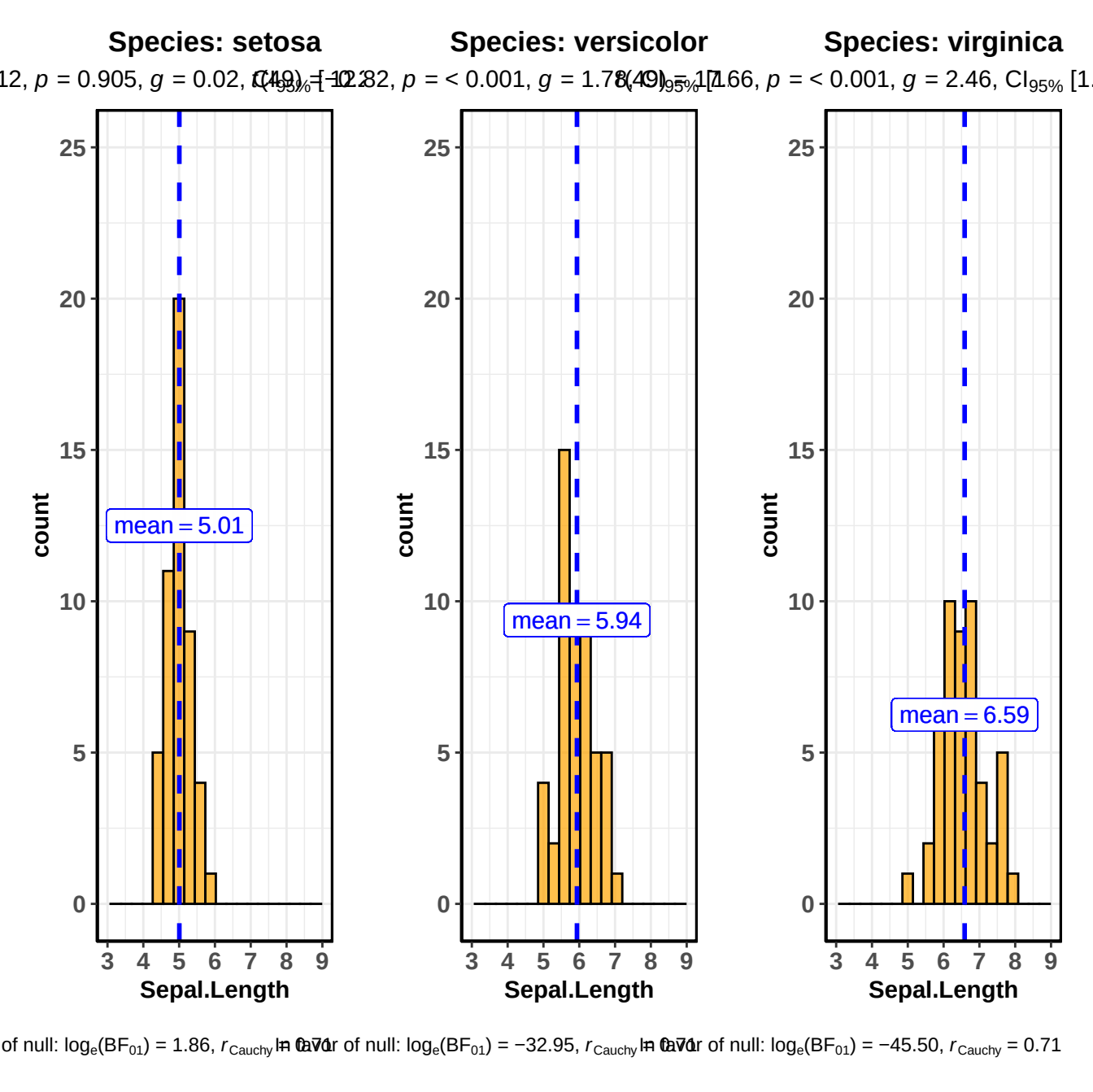
In favor of null: $\log_e(BF_{01}) = -0.23$, $r_{Cauchy} = 0.71$

cylinder count: 8

0) = −5.01, $p = 0.001$, $g = -1.38$, $CI_{95\%}$ [−2.49, −0.64], $n = 11$

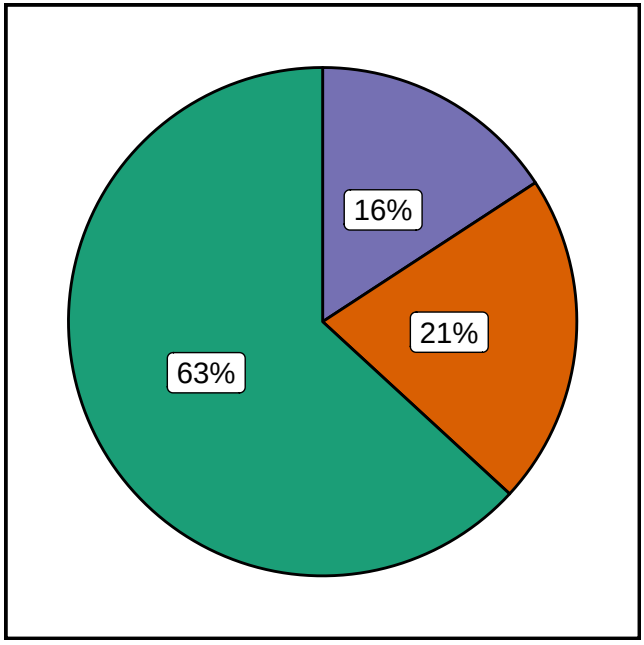


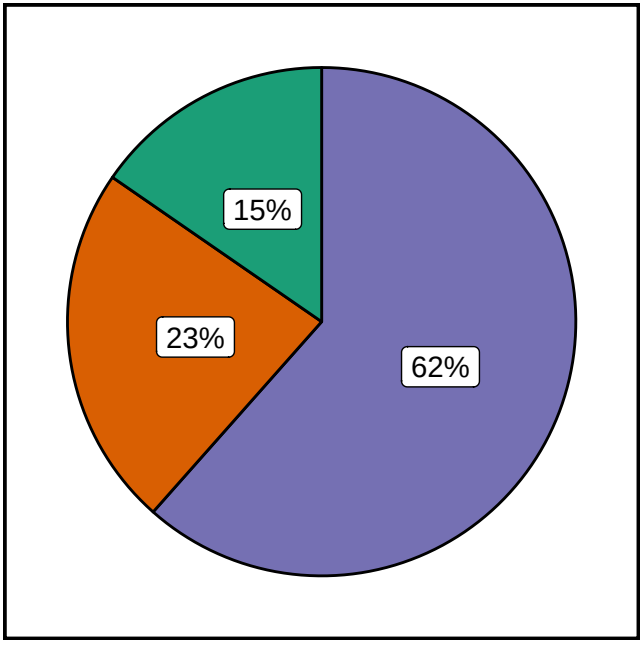
In favor of null: $\log_e(BF_{01}) = -4.24$, $r_{Cauchy} = 0.71$


Species: setosa
12, p = 0.905, g = 0.02, CI95% [−0.2
Species: versicolor
t(49) = −12.82, p = < 0.001, g = 1.78, CI95% [1.
Species: virginica
(49) = 17.66, p = < 0.001, g = 2.46, CI95% [1.
count
Sepal.Length
mean = 5.01
mean = 5.94
mean = 6.59
of null: log_e(BF01) = 1.86, r_Cauchy = 0.71
of null: log_e(BF01) = −32.95, r_Cauchy = 0.71
of null: log_e(BF01) = −45.50, r_Cauchy = 0.71

am: 0

2) = 7.68, p = 0.021, V_{Cramer} = 0.45, $CI_{95\%}$ [0.05, 0.74], χ^2(2) = 4.77, p = 0.092, V_{Cramer} = 0.43, $CI_{95\%}$ [0.00, 0.78], n =

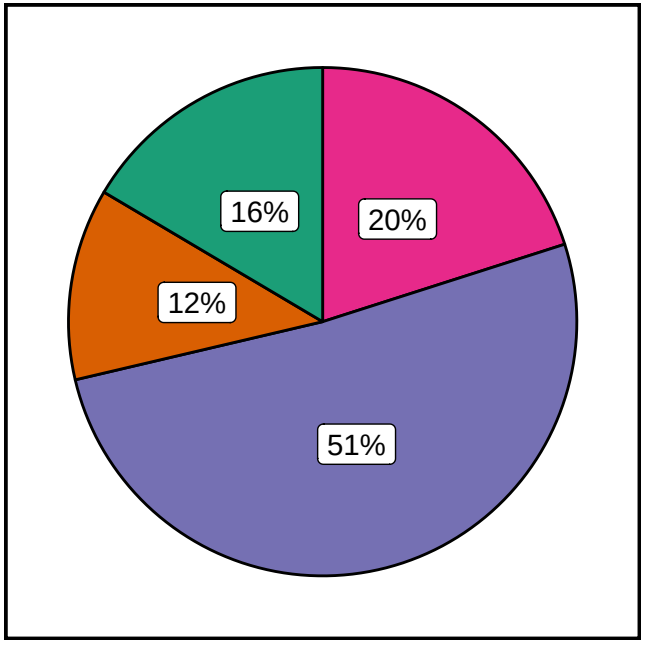




am: 1

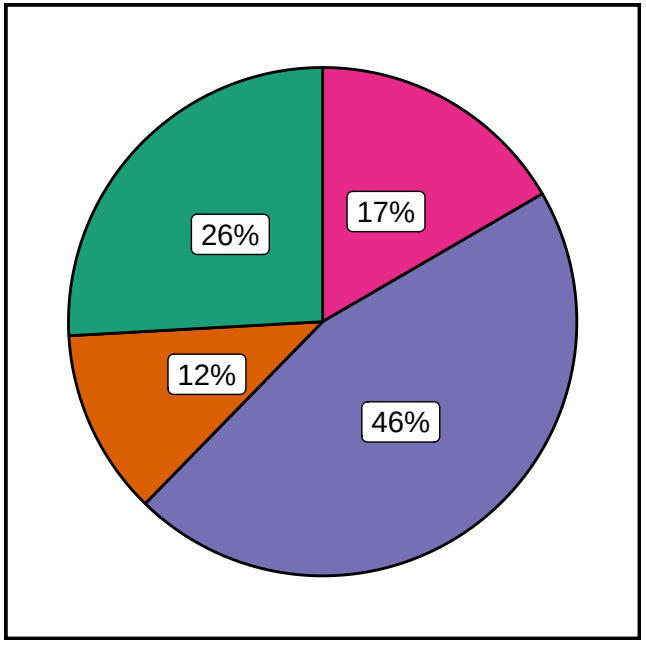
Sex: Male

= 106.05, p = < 0.001, V_{Cramer} = 0.36, $CI_{95\%}$ [0.28, 0.43], n = 1,023



Sex: Female

$\chi^2(3)$ = 84.23, p = < 0.001, V_{Cramer} = 0.30, $CI_{95\%}$ [0.23, 0.36], n

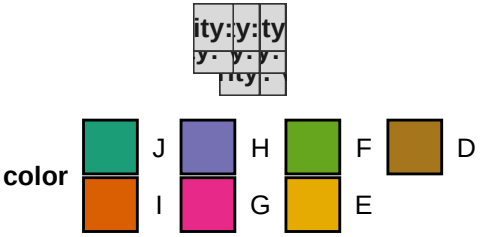


Hair Blond Red Brown Black

Hair Blond Red Brown Black

Quality: Fair

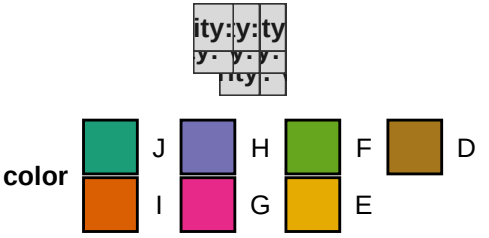
$\chi^2(42) = 55.71$, $p = 0.076$, $V_{\text{Cramer}} = 0.23$, $\text{CI}_{95\%}$ [0.11, 0.21], $n = 172$



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

Quality: Very Good

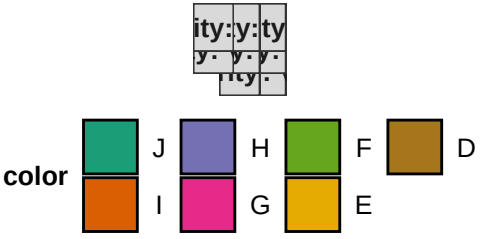
$\chi^2(42) = 64.05$, $p = 0.016$, $V_{\text{Cramer}} = 0.10$, $\text{CI}_{95\%}$ [0.04, 0.08], $n = 1187$



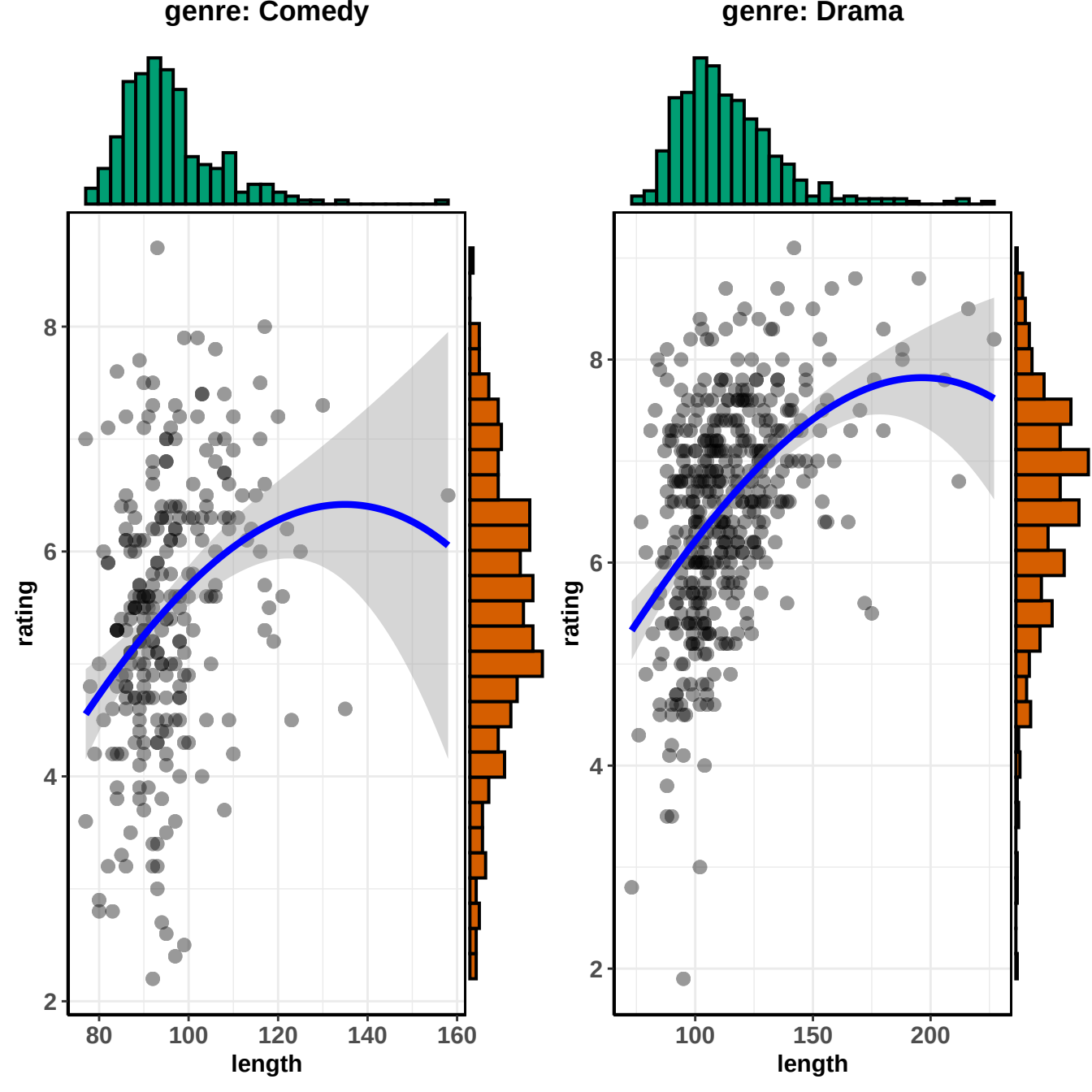
vor of null: $\log_e(\text{BF}_{01}) = 14.79$, sampling = poisson, $a = 1.00$

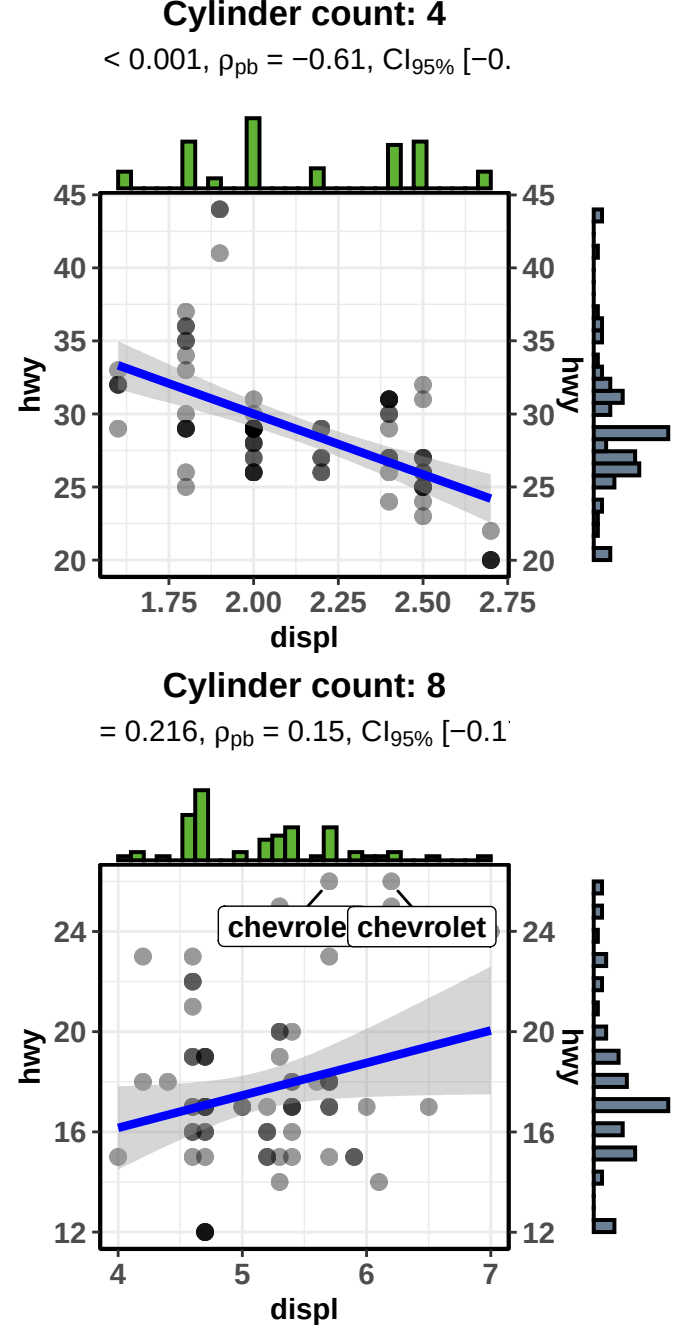
Quality: Ideal

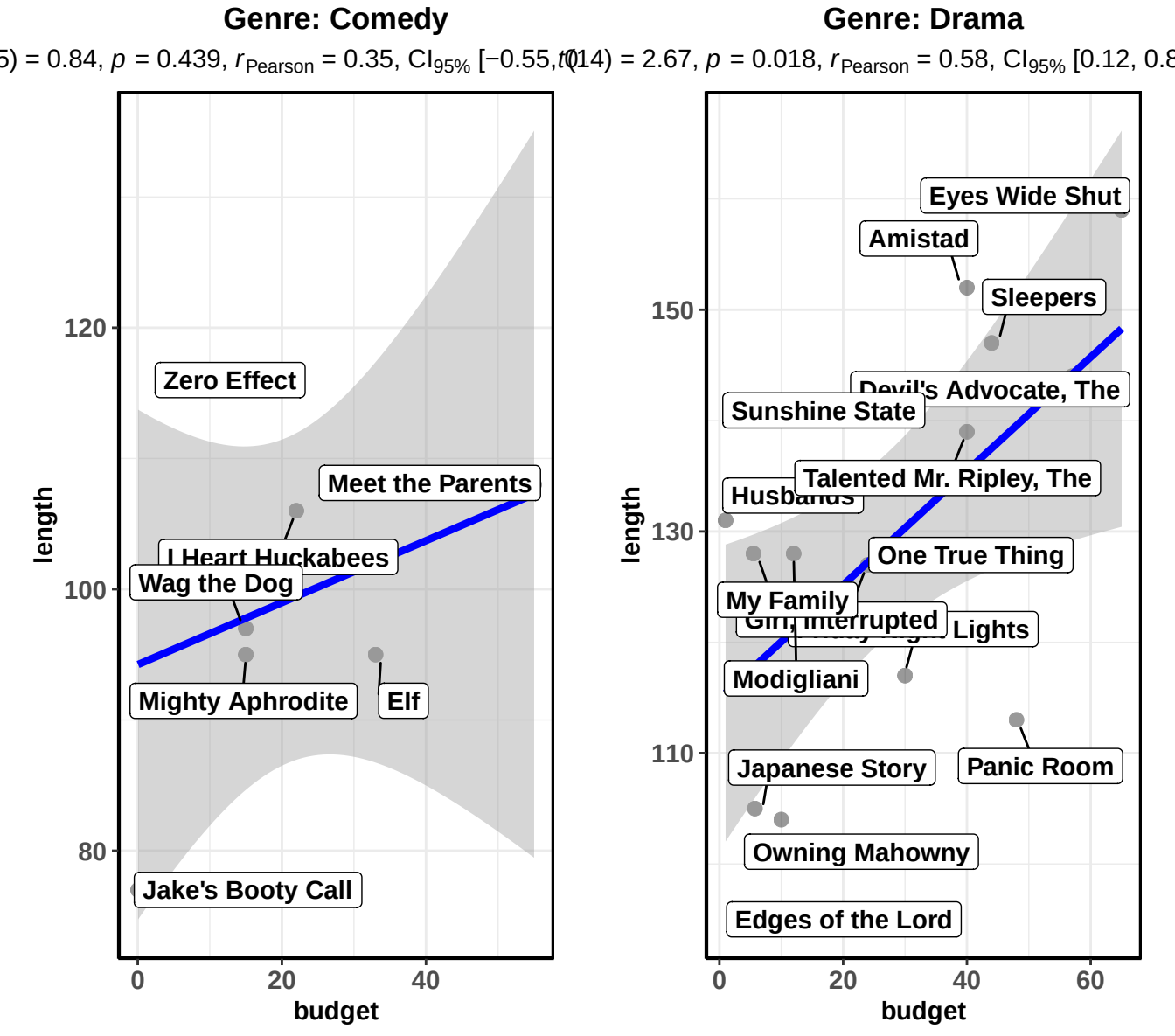
$\chi^2(42) = 153.32$, $p = < 0.001$, $V_{\text{Cramer}} = 0.11$, $\text{CI}_{95\%}$ [0.07, 0.10], $n = 2165$



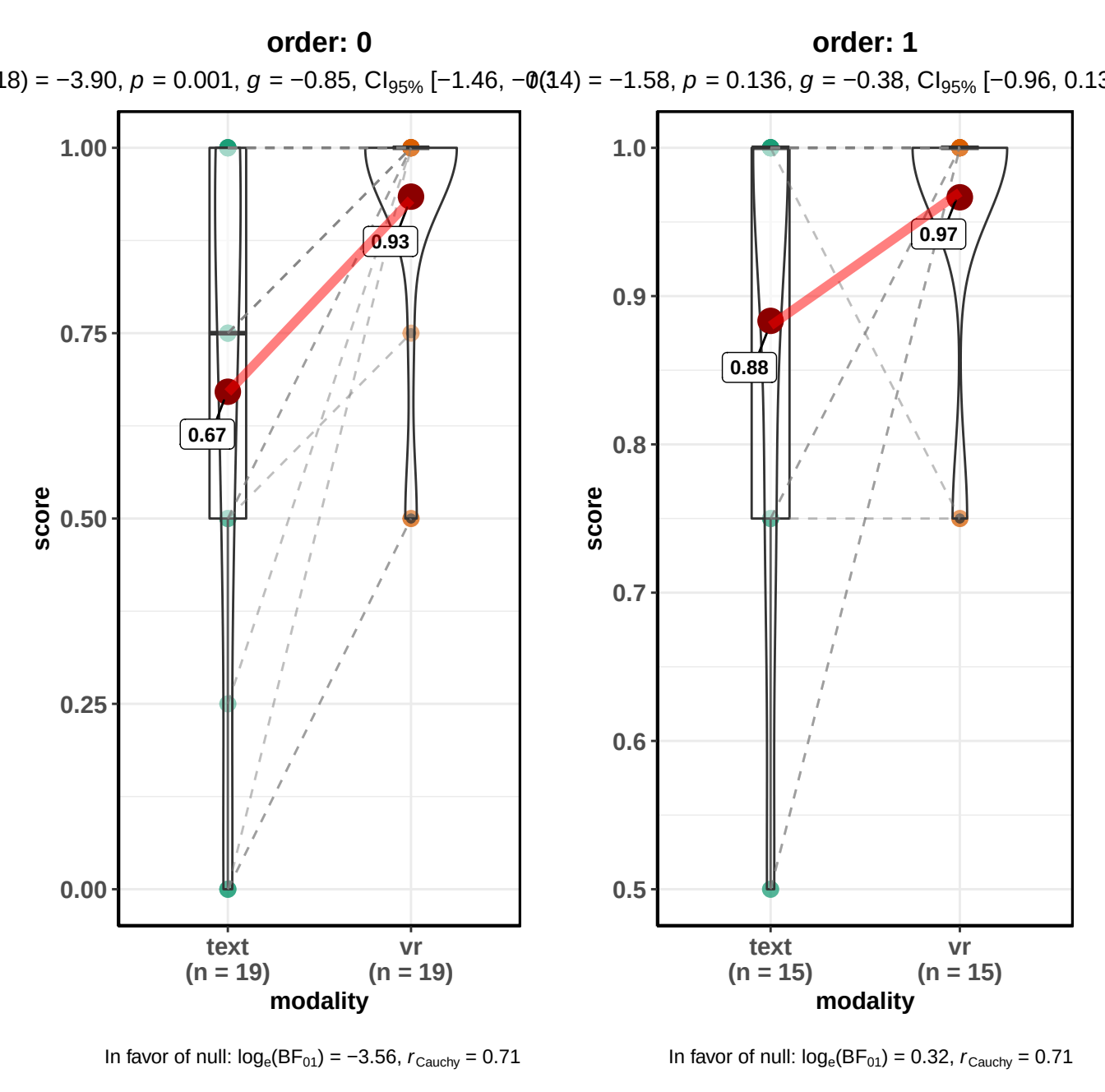
or of null: $\log_e(\text{BF}_{01}) = -25.04$, sampling = poisson, $a = 1.00$

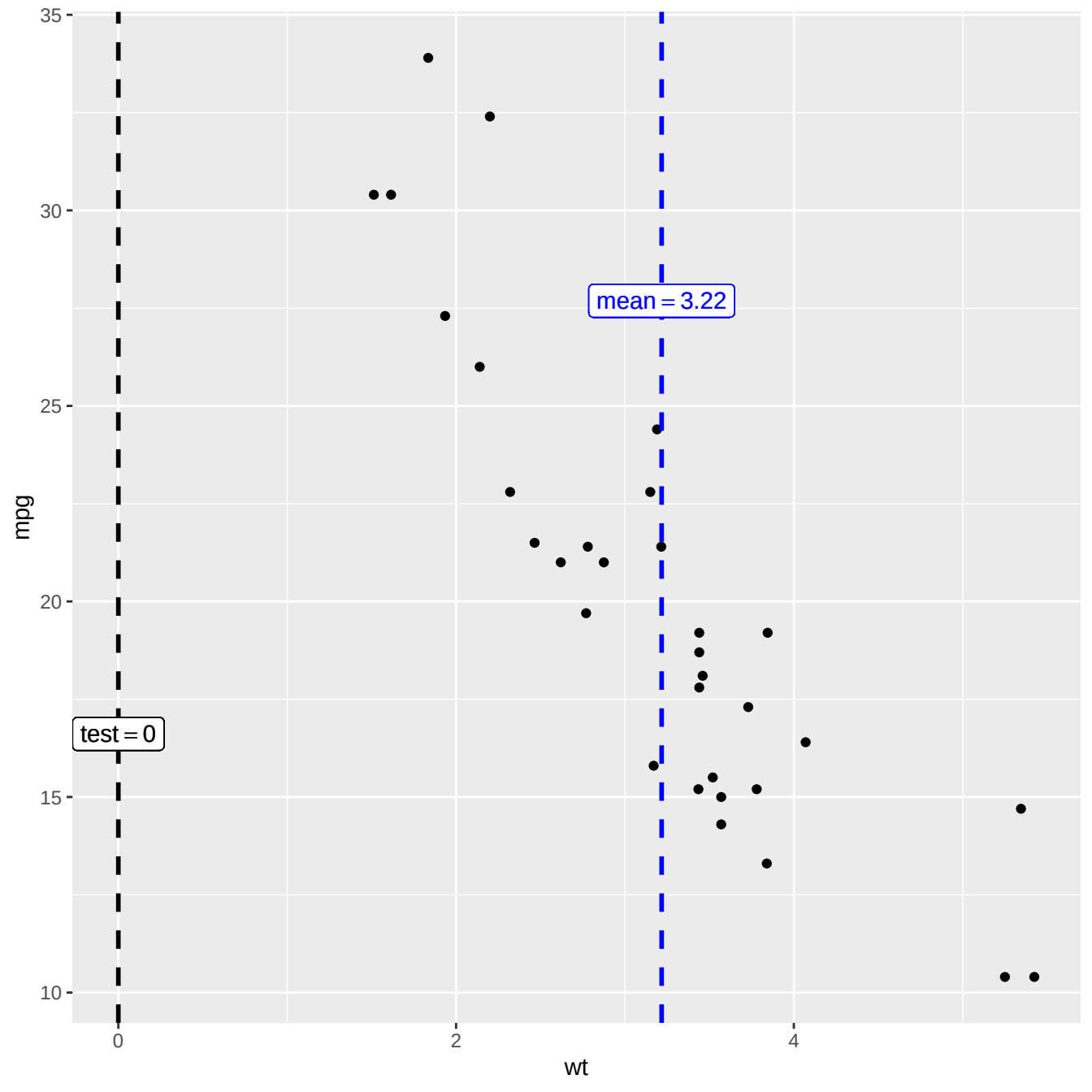

genre: Comedy
genre: Drama
rating
length
8
6
4
2
80
100
120
140
160
150
200

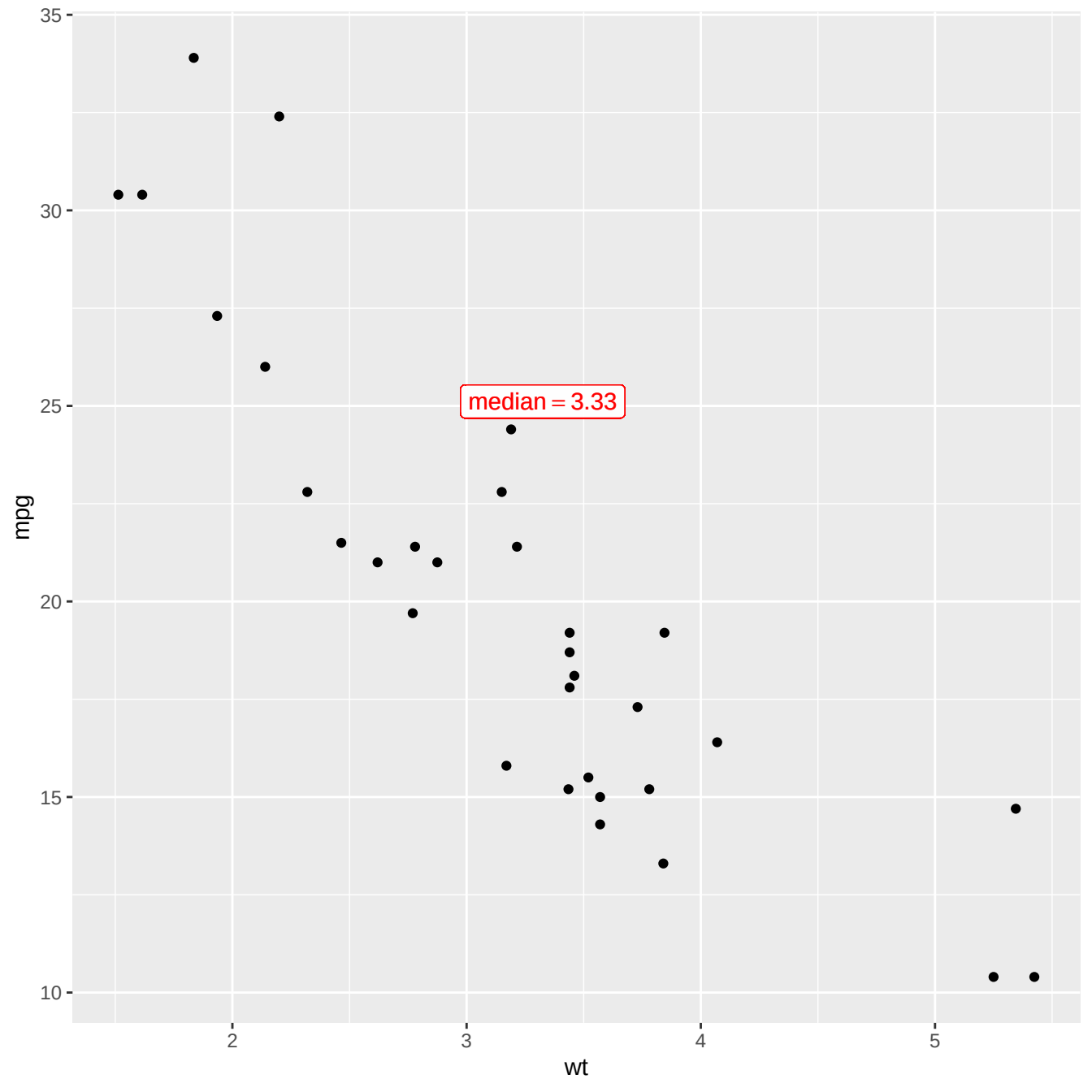

Cylinder count: 4
< 0.001, ρpb = −0.61, CI95% [−0.
hwy
displ
Cylinder count: 6
< 0.001, ρpb = −0.50, CI95% [−0.
volkswagen
toyota
ford
chevrolet
nissan
hwy
displ
Cylinder count: 8
= 0.216, ρpb = 0.15, CI95% [−0.1
chevrole
chevrolet
hwy
displ

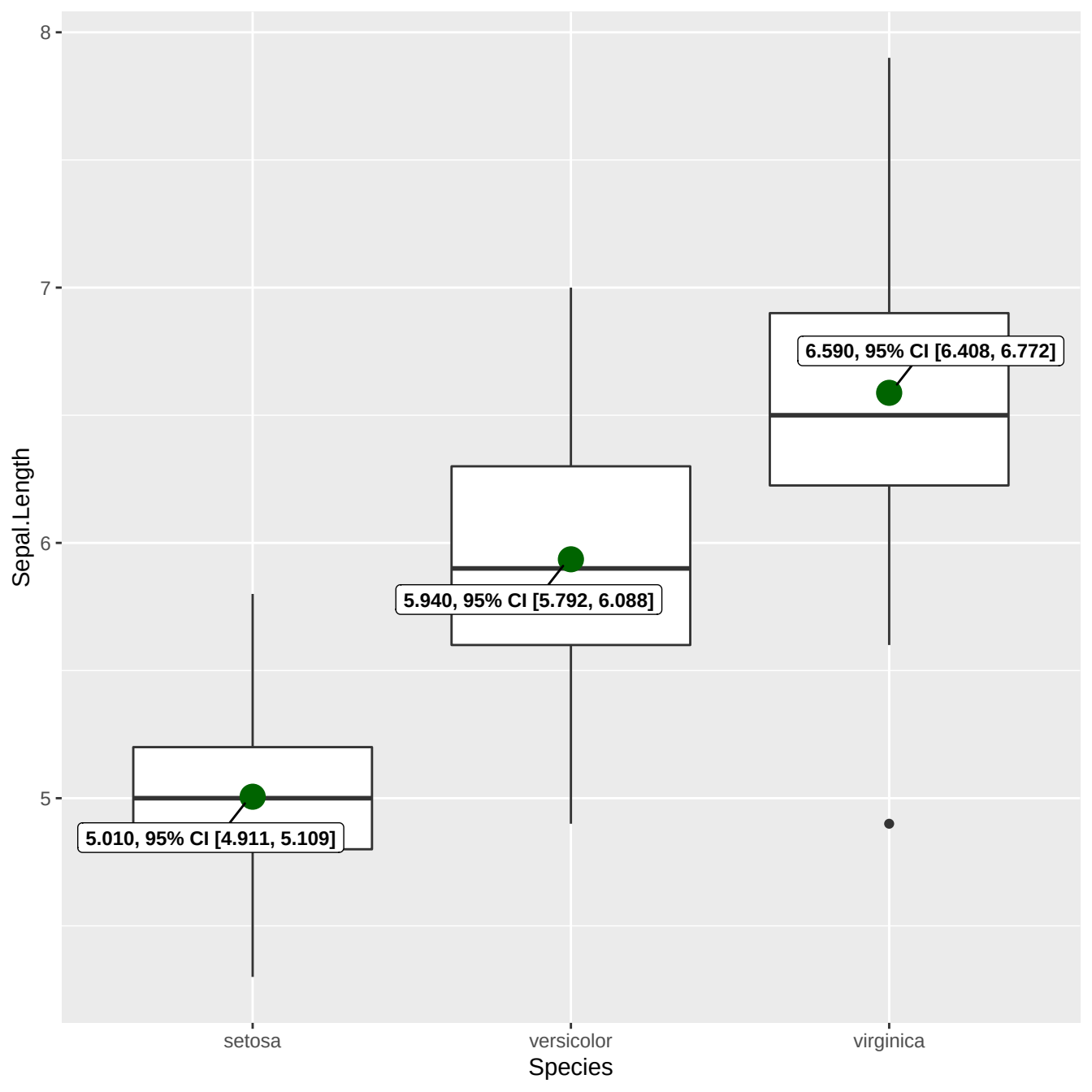


All movies have IMDB rating equal to 7.


order: 0
18) = −3.90, p = 0.001, g = −0.85, CI95% [−1.46, −0
order: 1
(14) = −1.58, p = 0.136, g = −0.38, CI95% [−0.96, 0.13
1.00
0.75
0.50
0.25
0.00
score
0.93
0.67
text
(n = 19)
vr
(n = 19)
modality
In favor of null: loge(BF01) = −3.56, rCauchy = 0.71
1.0
0.9
0.8
0.7
0.6
0.5
score
0.97
0.88
text
(n = 15)
vr
(n = 15)
modality
In favor of null: loge(BF01) = 0.32, rCauchy = 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
6.590, 95% CI [6.408, 6.772]
5.940, 95% CI [5.792, 6.088]
5.010, 95% CI [4.911, 5.109]
setosa
versicolor
virginica
Species