

Dataset: Iris Flower dataset

(a) setosa

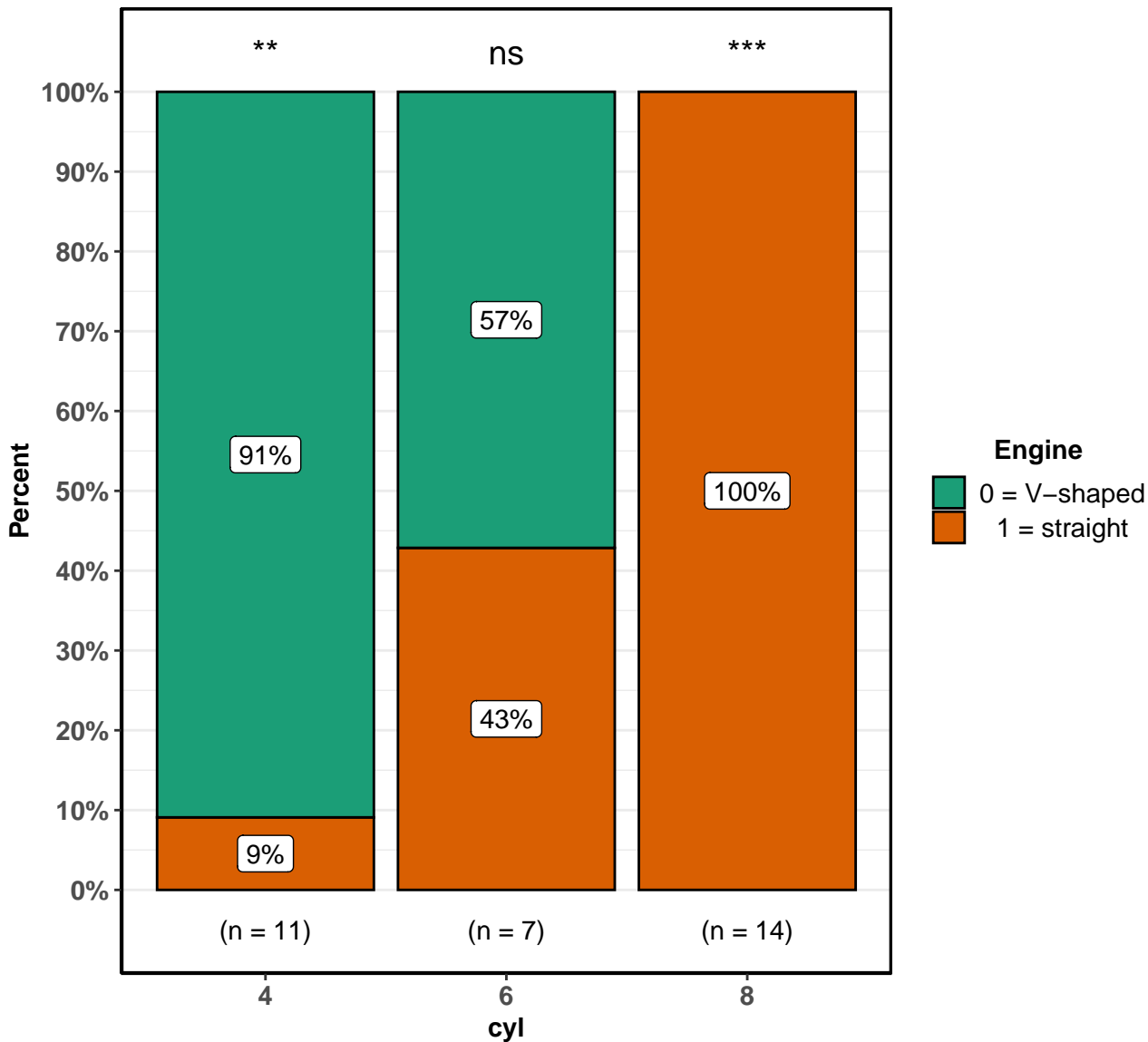


(b) versicolor



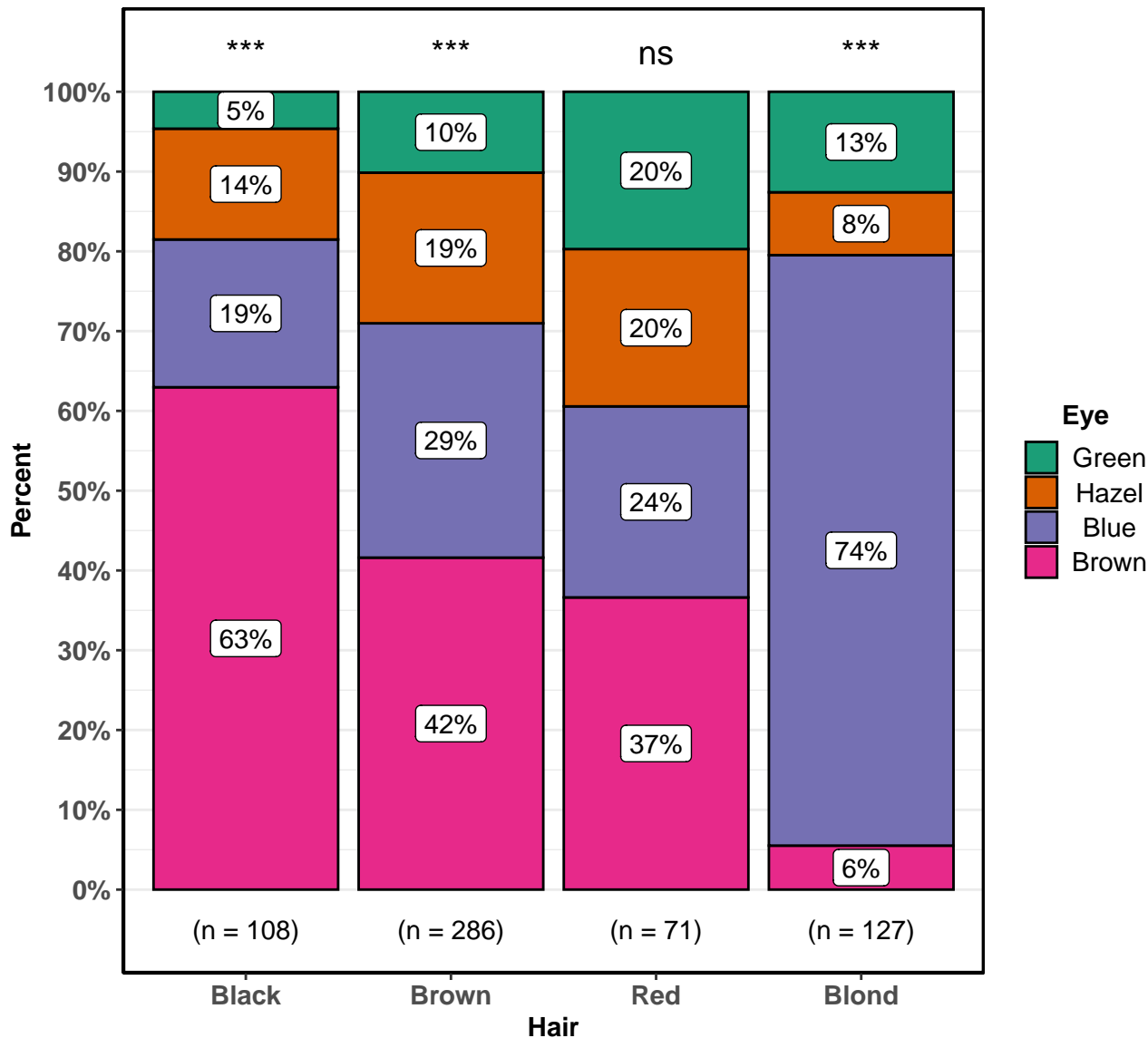
Note: Only two species of flower are displayed

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



In favor of null: $\log_e(\text{BF}_{01}) = -10.86$, sampling = joint multinomial, $a = 1.00$

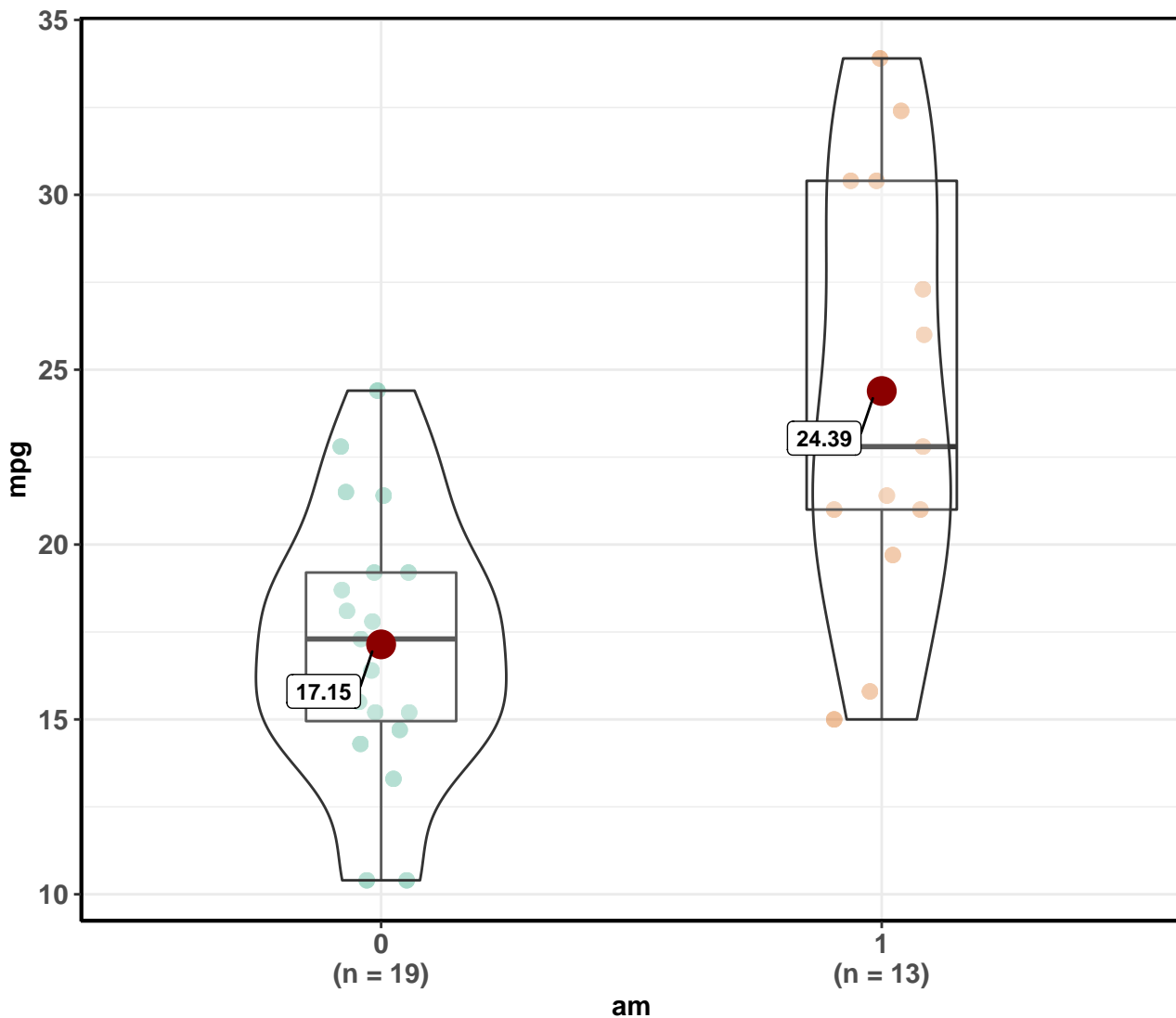
$\chi^2(9) = 138.29, p = < 0.001, V_{\text{Cramer}} = 0.28, \text{CI}_{95\%} [0.23, 0.31], n = 592$



In favor of null: $\log_e(\text{BF}_{01}) = -57.51$, sampling = joint multinomial, $a = 1.00$

Fuel efficiency by type of car transmission

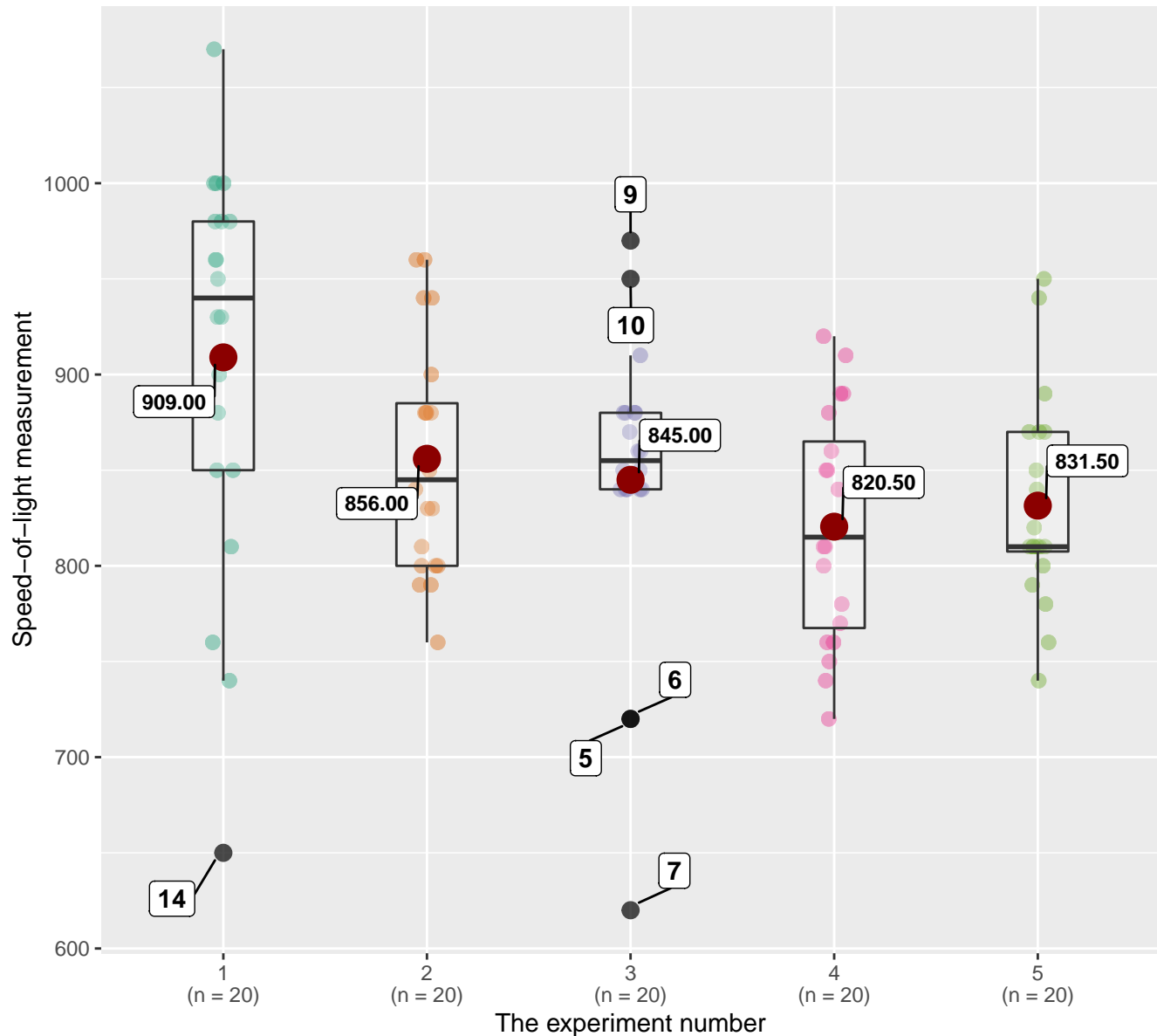
$t(18.33) = -3.77, p = 0.001, g = -1.38, \text{CI}_{95\%} [-2.17, -0.51], n = 32$



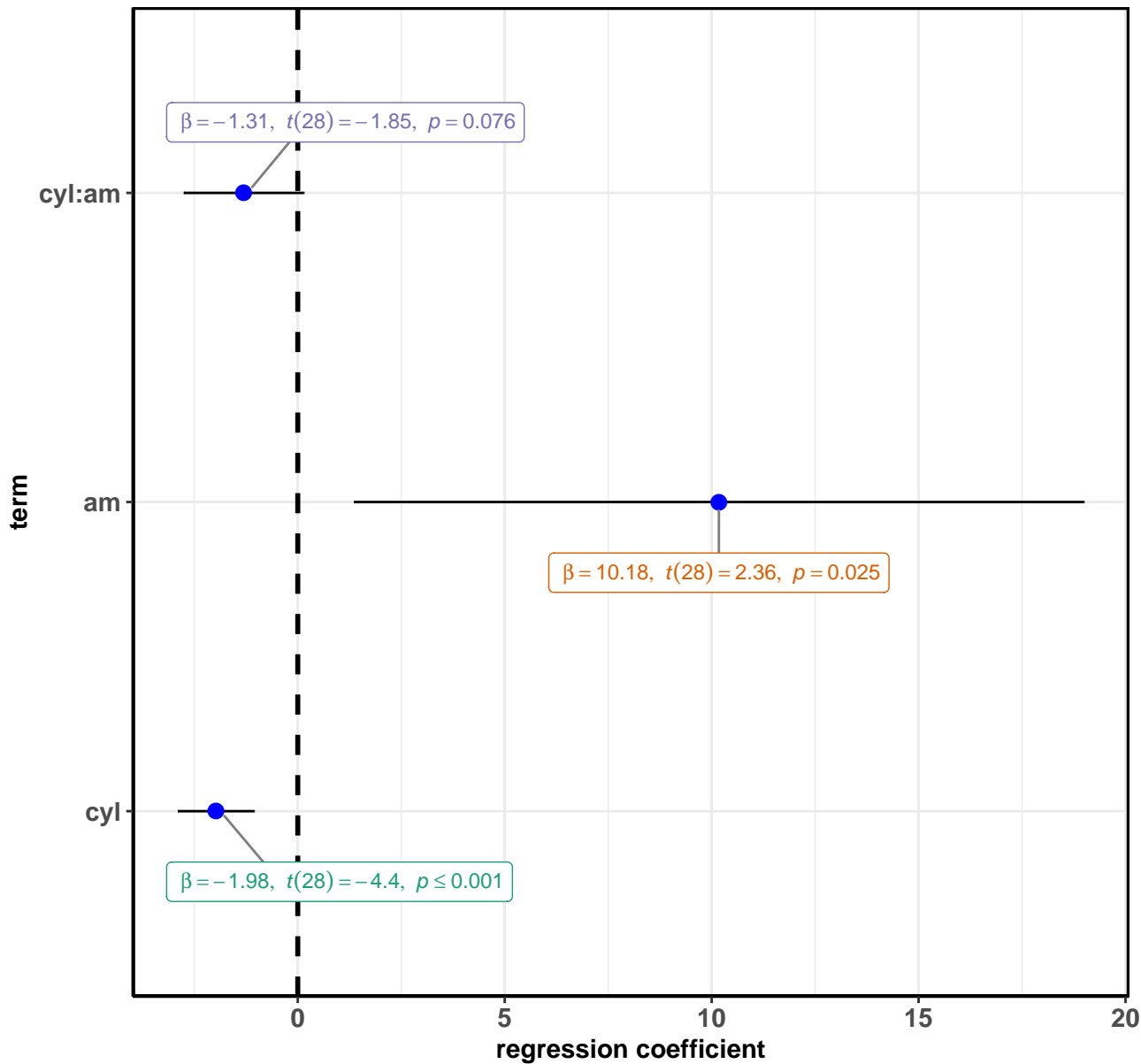
Transmission (0 = automatic, 1 = manual)

In favor of null: $\log_e(\text{BF}_{01}) = -4.46, r_{\text{Cauchy}} = 0.71$

$F(4,47.04) = 3.01$, $p = 0.027$, $\omega_p^2 = 0.12$, $CI_{99\%} [-0.03, 0.31]$, $n = 100$

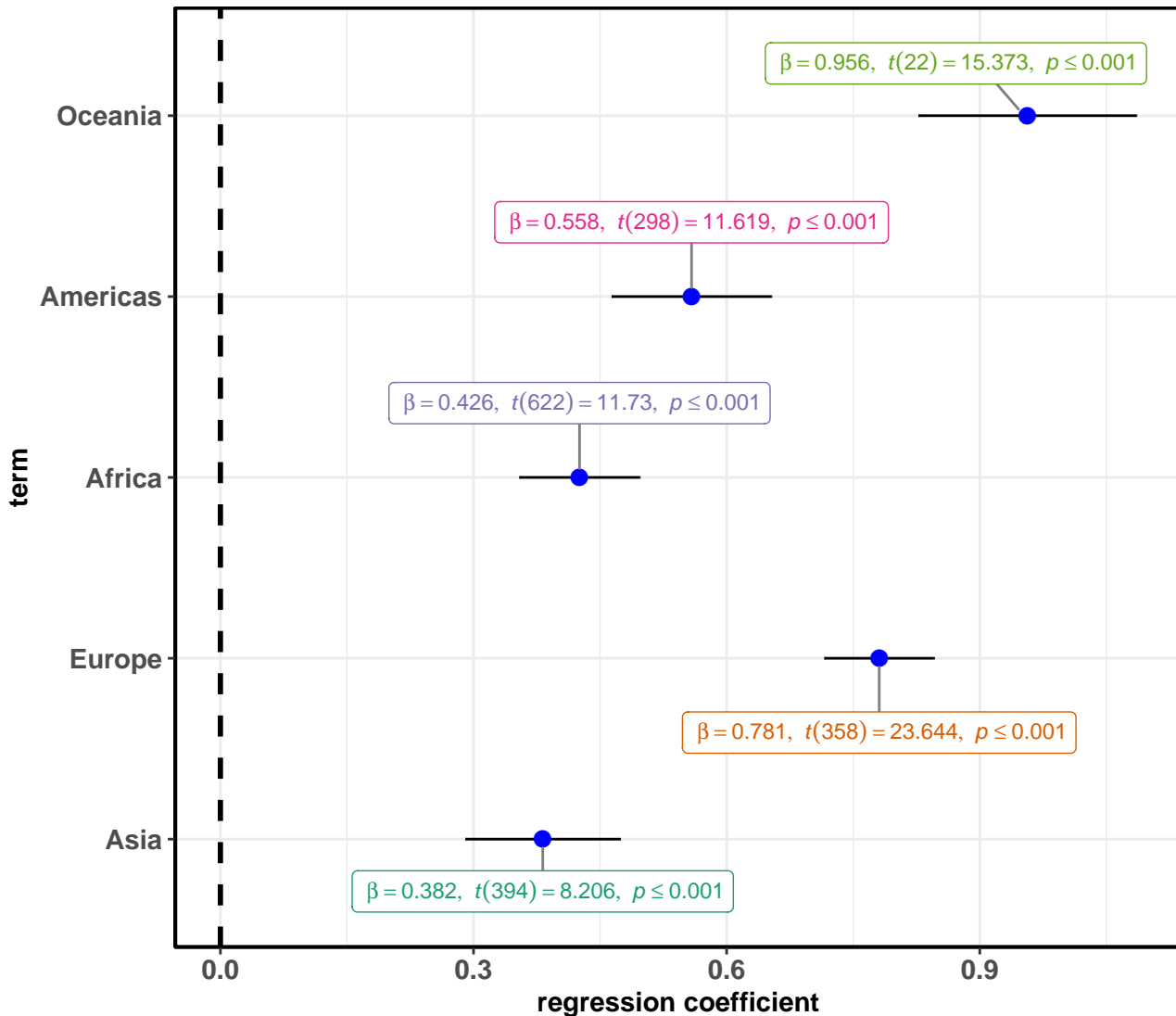


Pairwise comparisons: **Games-Howell test**; Adjustment (p-value): **Benjamini & Hochberg**



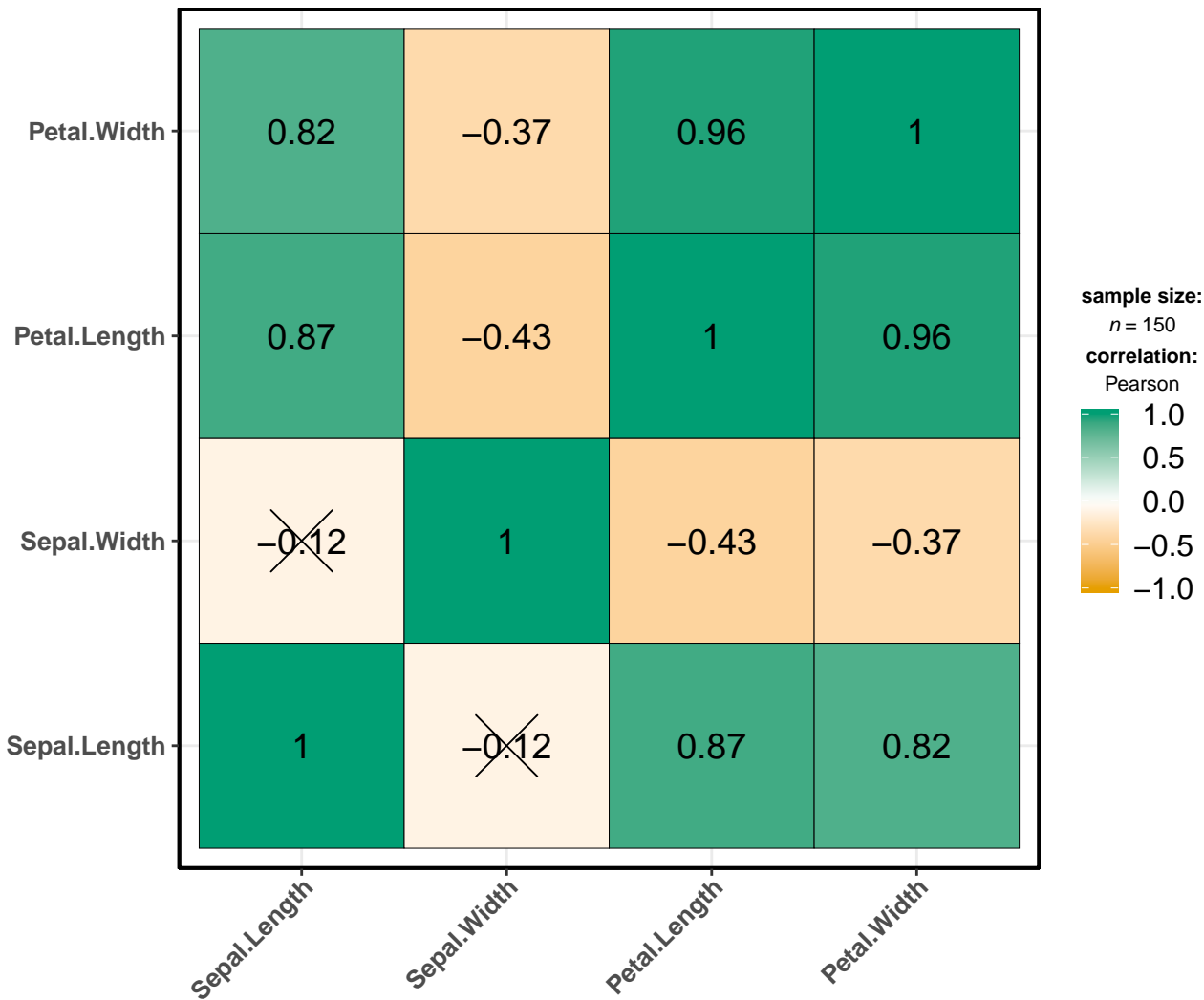
AIC = 166, BIC = 173, log-likelihood = -78

Summary effect: $\beta = 0.619$, $CI_{95\%} [0.407, 0.830]$, $z = 5.736$, $se = 0.108$, $p = < 0.001$



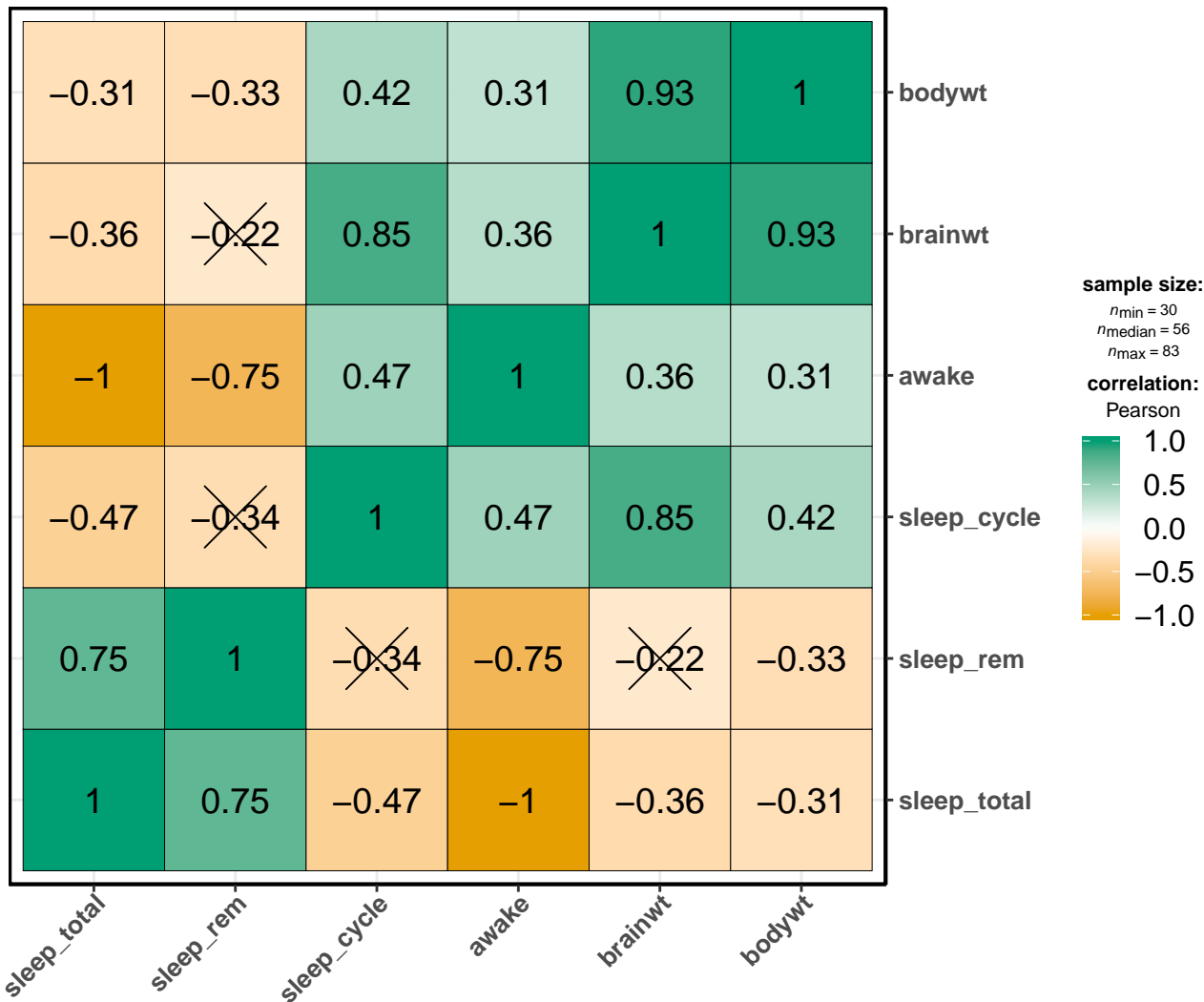
In favor of null: $\log_e(BF_{01}) = -2.680$, $d_{\text{mean}}^{\text{posterior}} = 0.491$, $CI_{95\%} [0.147, 0.775]$

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



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

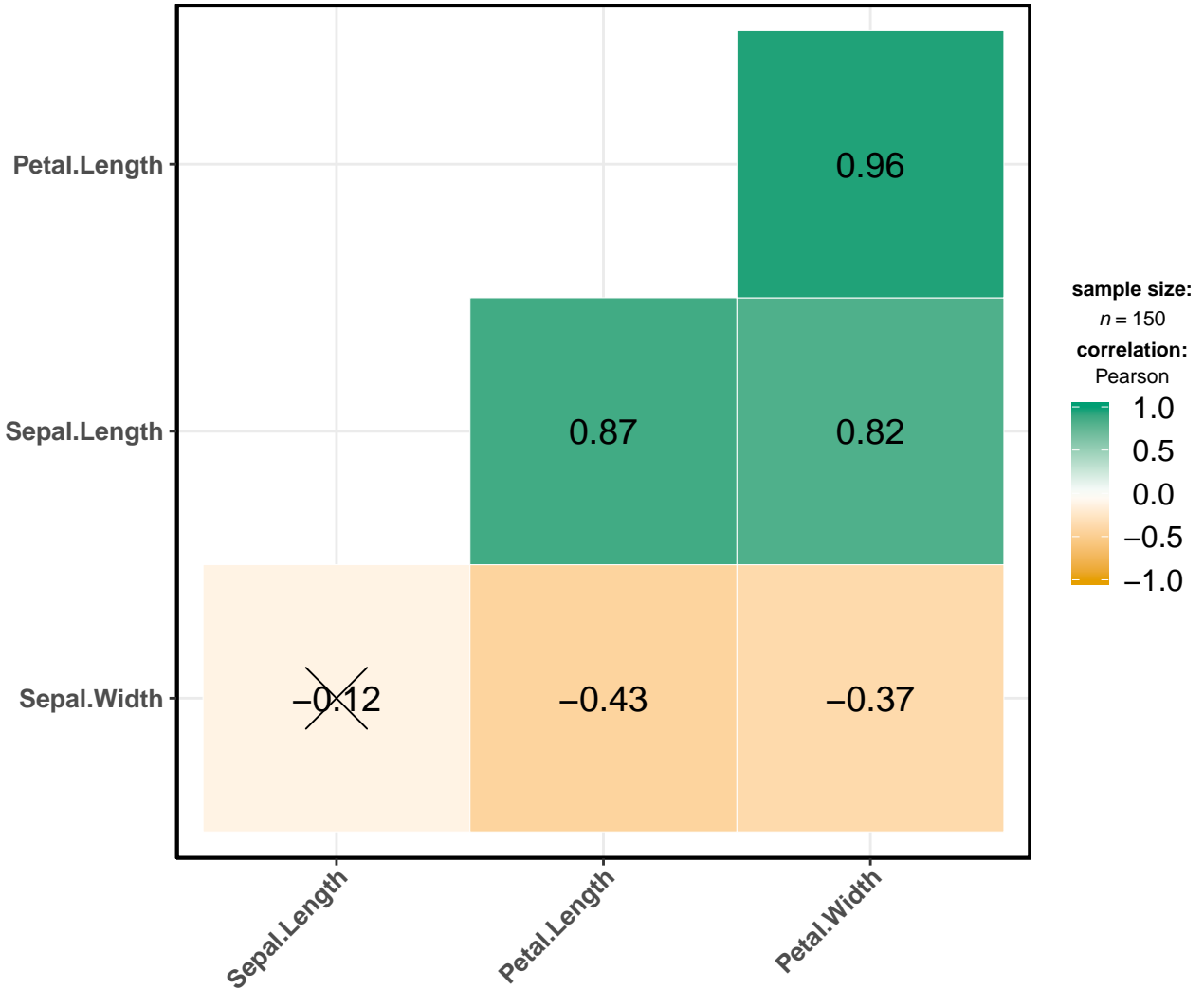
Adjustment (p-value): None



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

Adjustment (p-value): None

Dataset: Iris

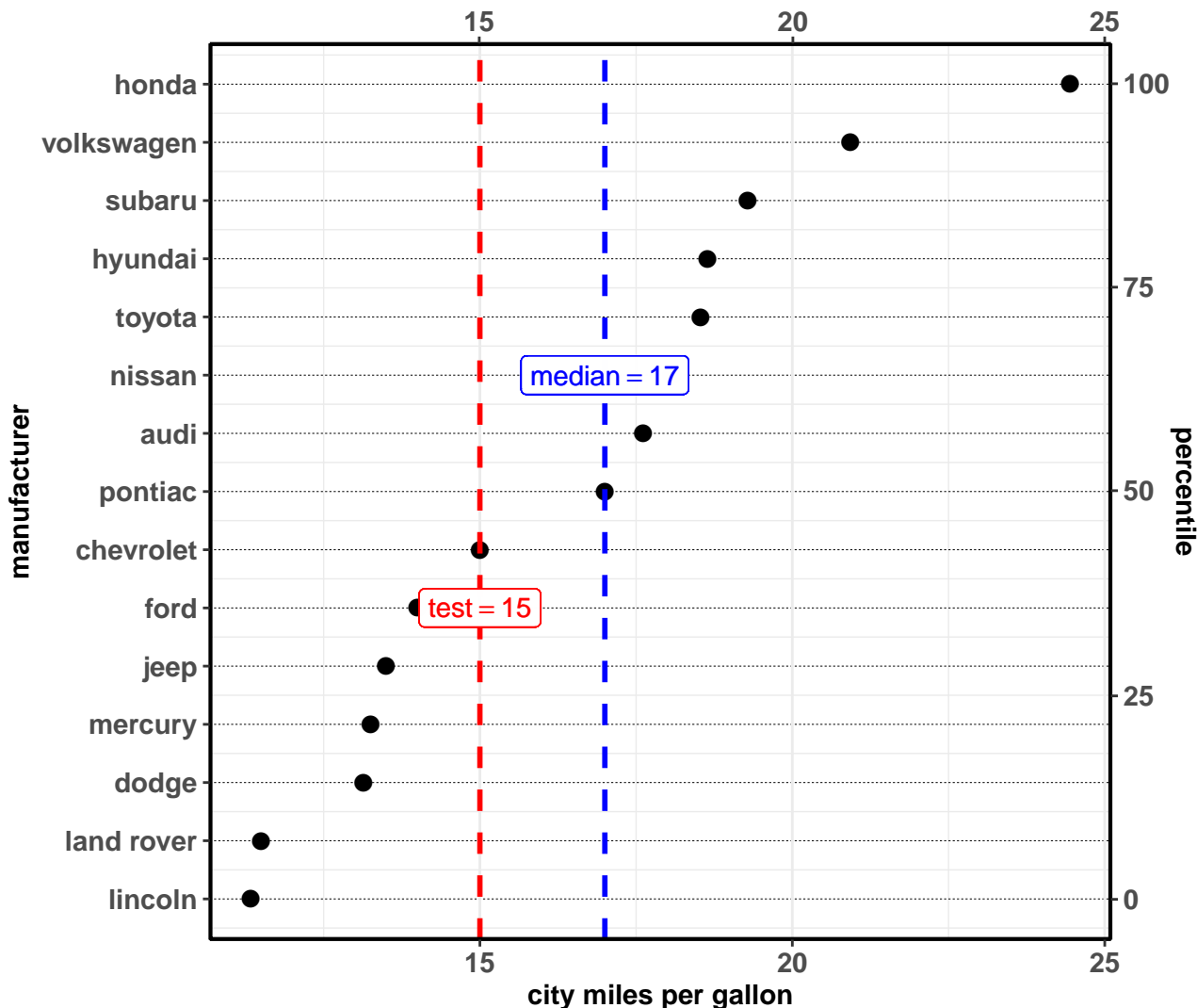


X = correlation non-significant at $p < 0.01$

Adjustment (p-value): None

Fuel economy data

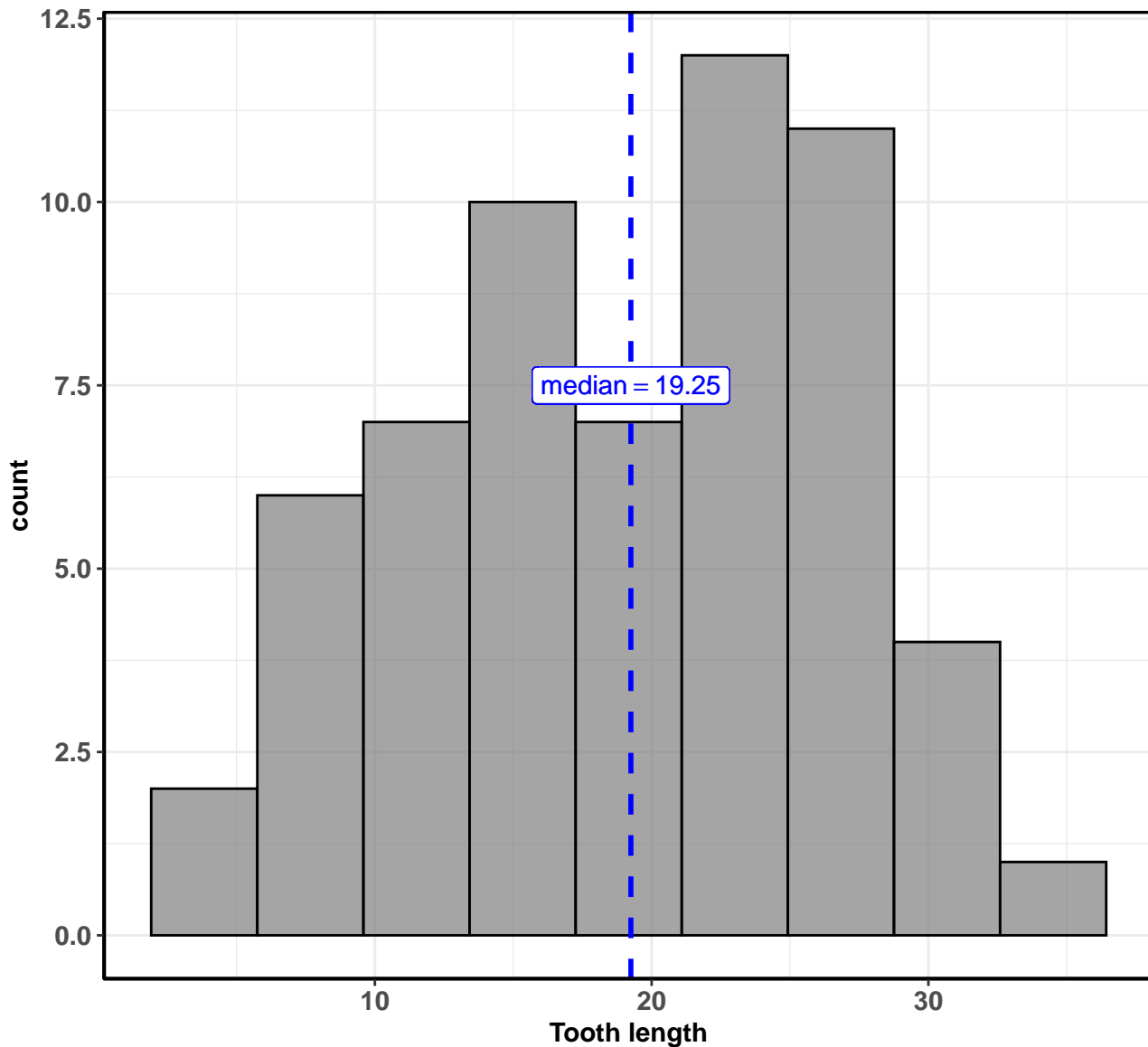
$t(14) = 1.47$, $p = 0.163$, $g = 0.36$, $CI_{99\%} [-0.33, 1.10]$, $n = 15$



Source: EPA dataset on <http://fuelconomy.gov>

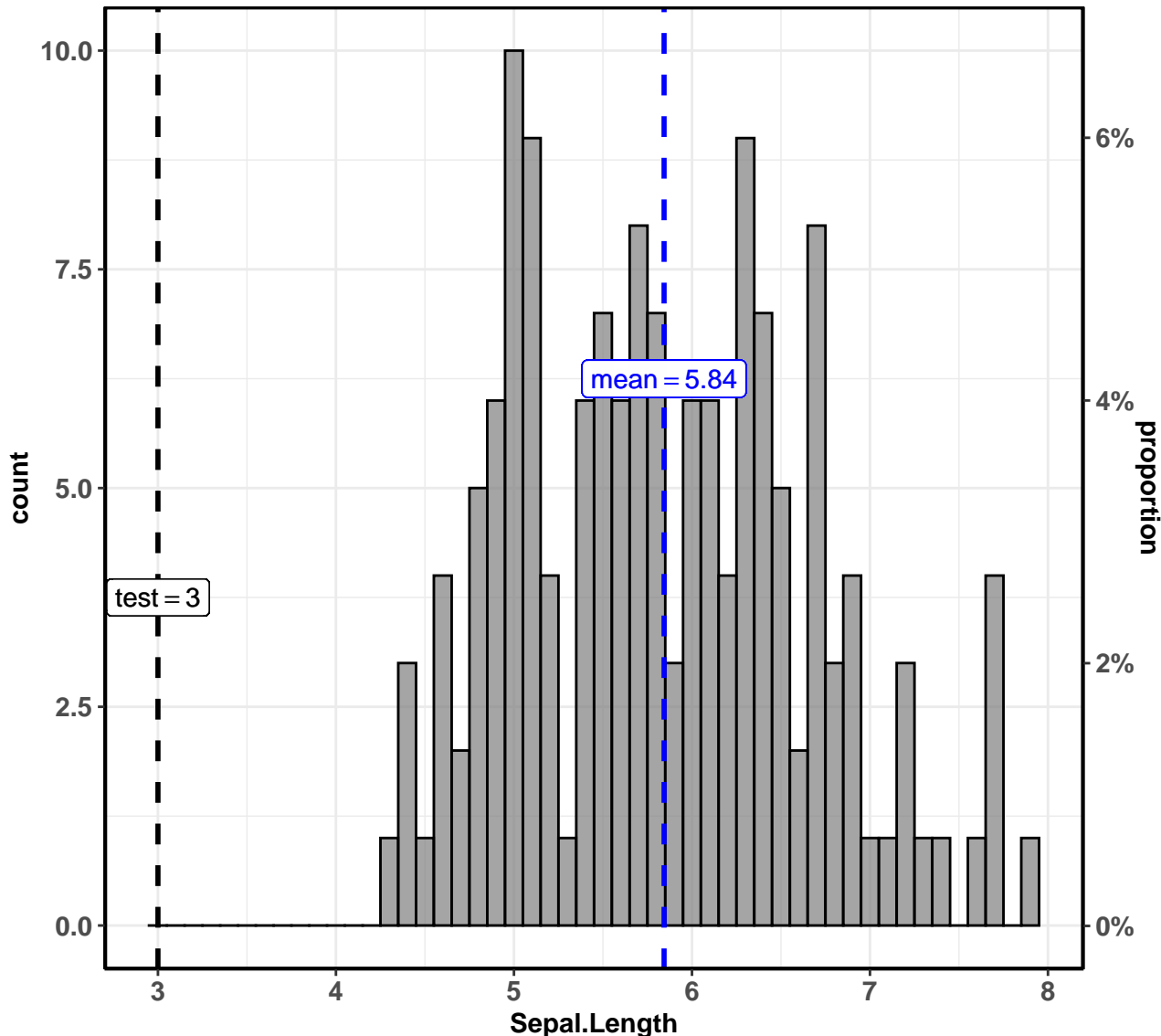
In favor of null: $\log_e(BF_{01}) = 0.44$, $r_{\text{Cauchy}} = 0.71$

$t(59) = 19.05, p = < 0.001, g = 2.43, CI_{95\%} [1.96, 2.99], n = 60$



In favor of null: $\log_e(BF_{01}) = -54.54, r_{\text{Cauchy}} = 0.71$

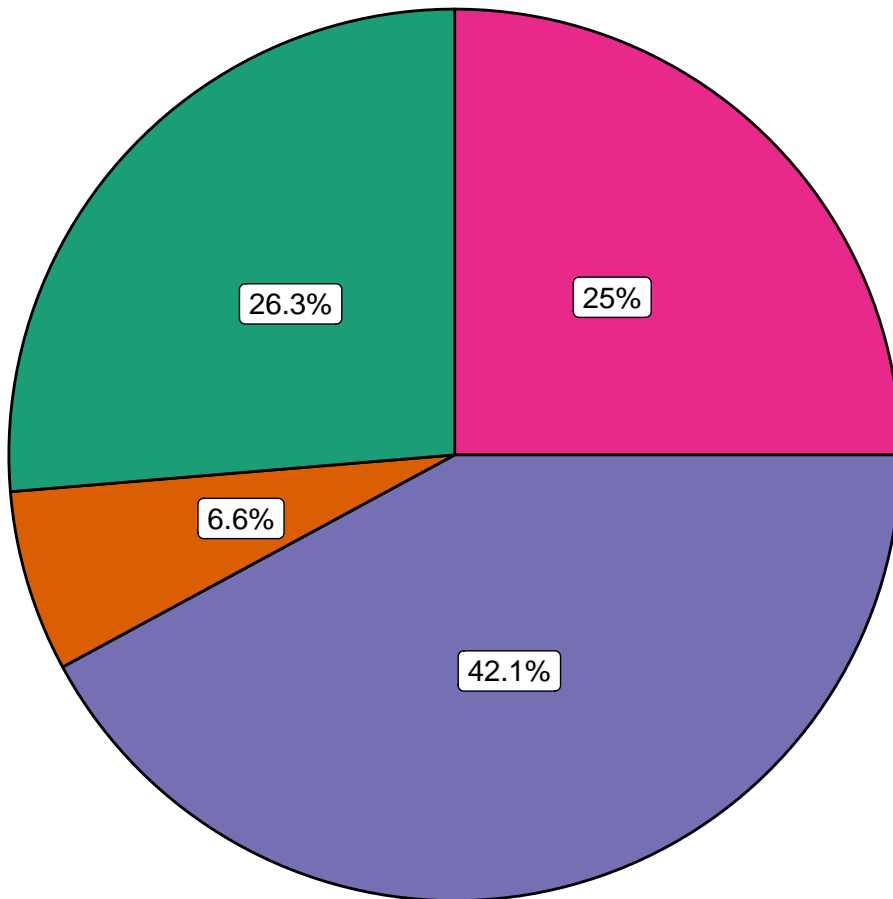
$t(149) = 42.05$, $p = < 0.001$, $g = 3.42$, $CI_{95\%} [3.02, 3.86]$, $n = 150$







Note: Iris dataset by Fisher.

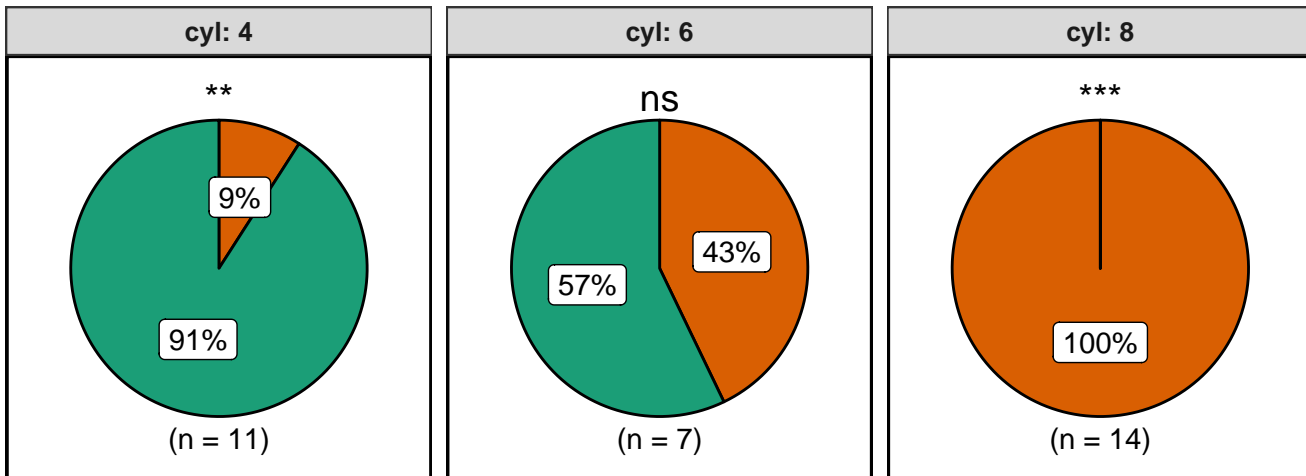
In favor of null: $\log_e(BF_{01}) = -186.14$, $r_{\text{Cauchy}} = 0.80$



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



vore  omni  insecti  herbi  carni

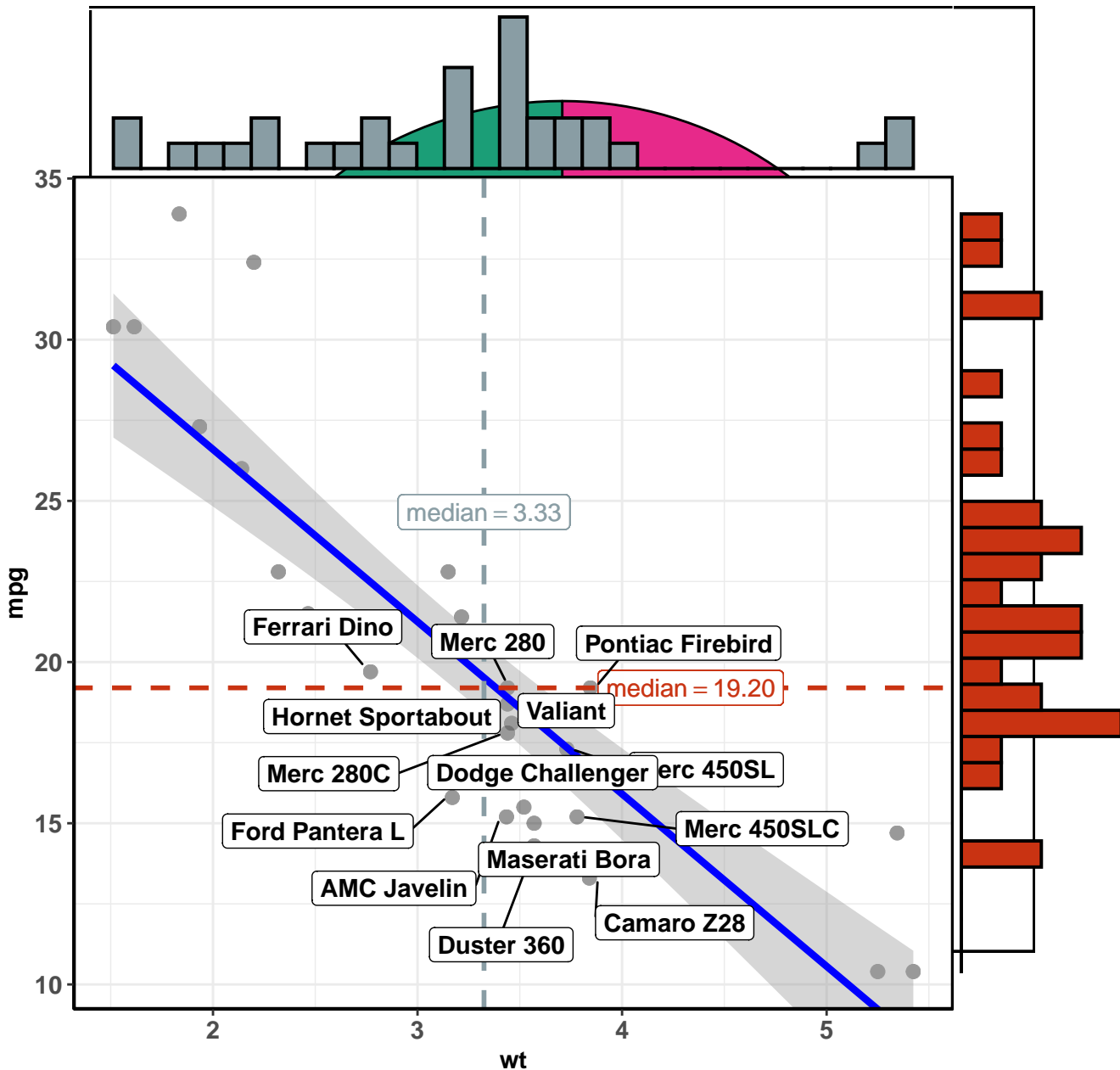
$\chi^2(2) = 21.34, p = < 0.001, V_{\text{Cramer}} = 0.82, \text{CI}_{95\%} [0.41, 0.68], n = 32$

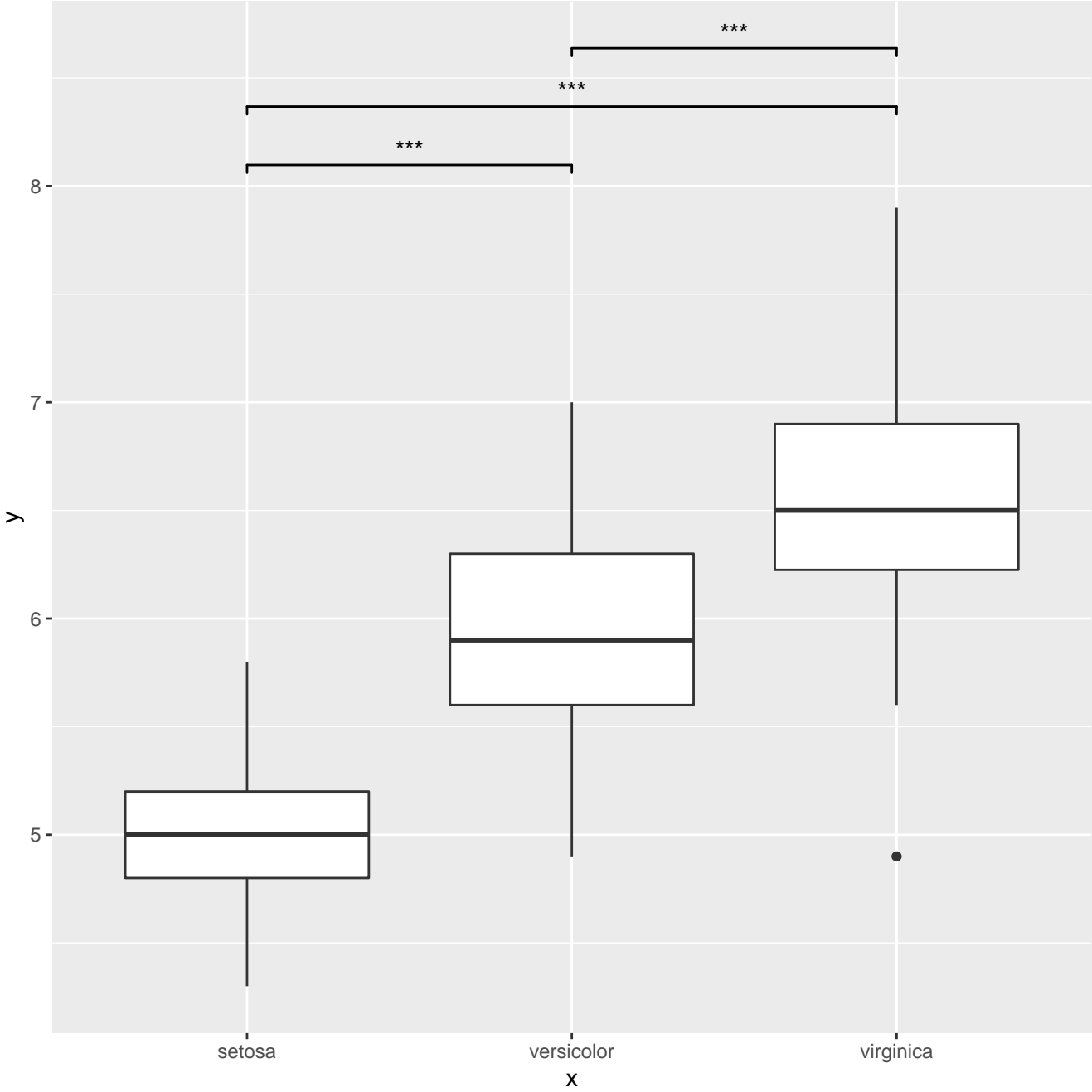


Engine  0 = V-shaped  1 = straight

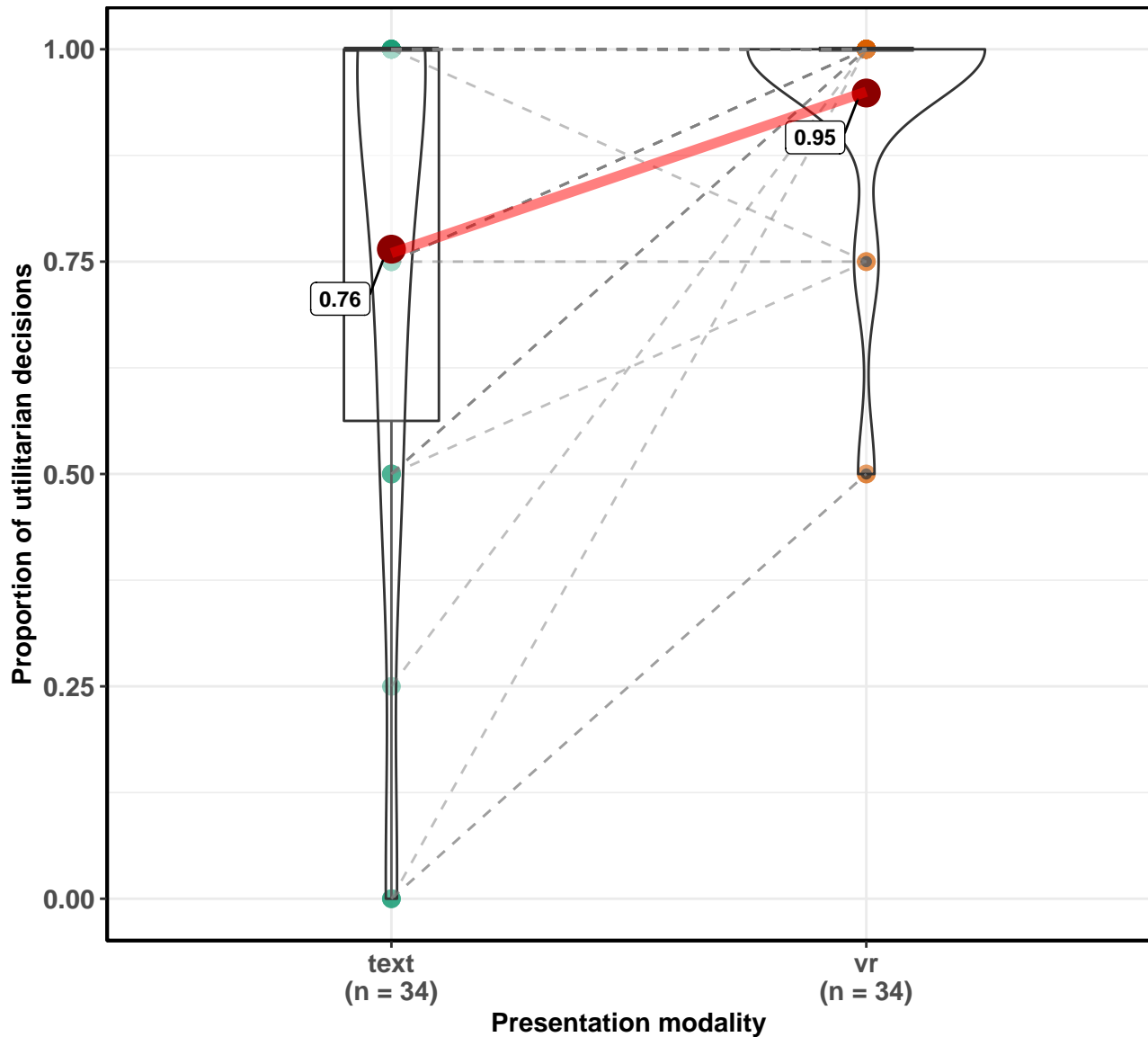
In favor of null: $\log_e(\text{BF}_{01}) = -10.31$, sampling = independent multinomial, $a = 1.00$

$\log_e(S) = 9.24, p = < 0.001, \rho_{\text{Spearman}} = -0.89, \text{CI}_{95\%} [-0.94, -0.78], n = 32$
 $\chi^2(3) = 133.47, p = < 0.001, v_{\text{Cramer}} = 0.27, \text{CI}_{95\%} [0.23, 0.32], n = 592$



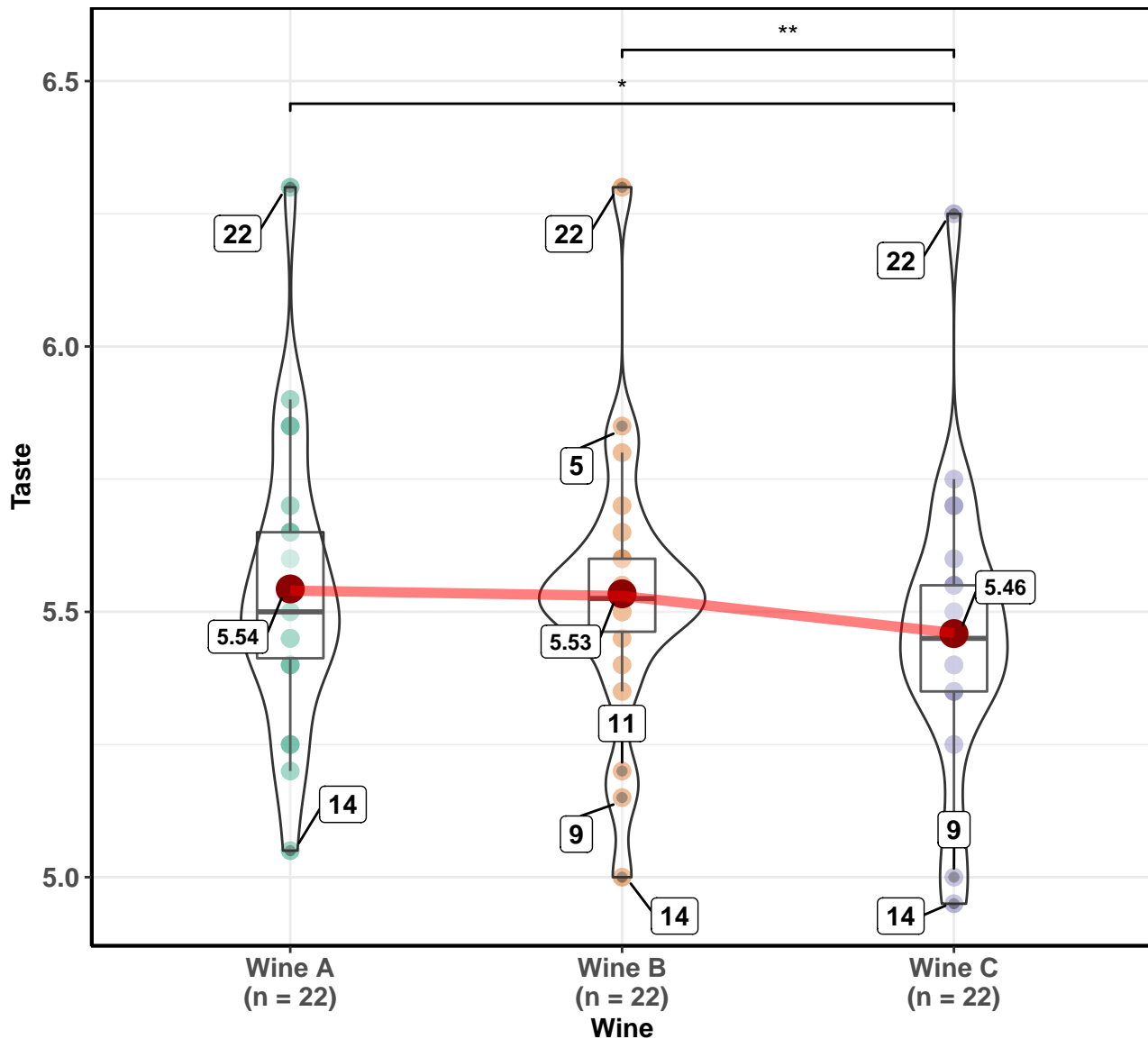


$t(33) = -3.96, p = < 0.001, g = -0.66, CI_{95\%} [-1.07, -0.31], n = 34$



In favor of null: $\log_e(BF_{01}) = -4.34, r_{\text{Cauchy}} = 0.71$

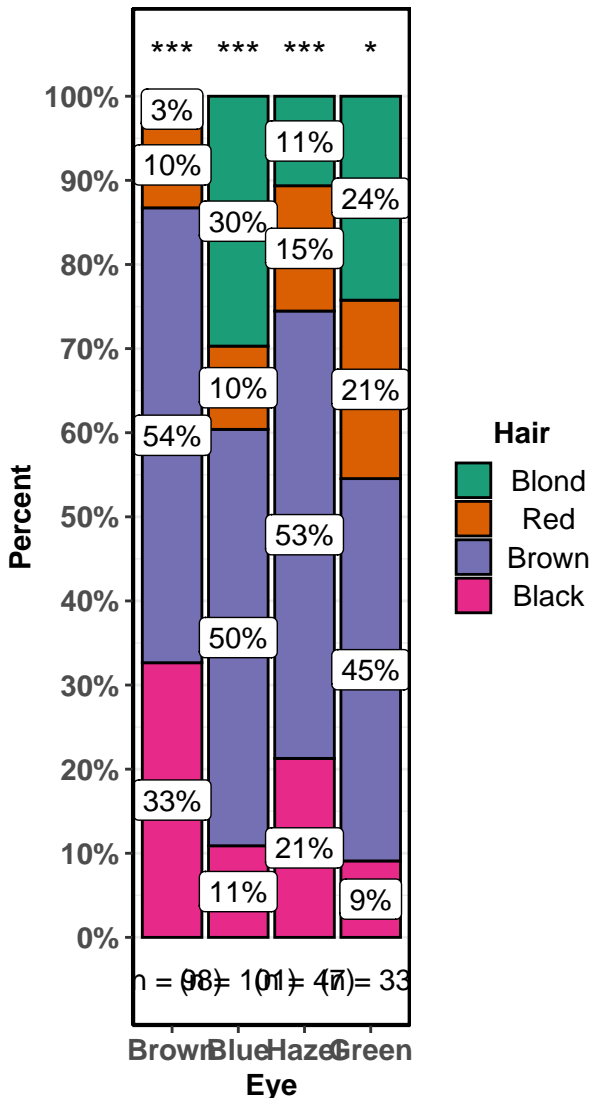
$F(1.65, 27.97) = 4.06, p = 0.035, n = 22$



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

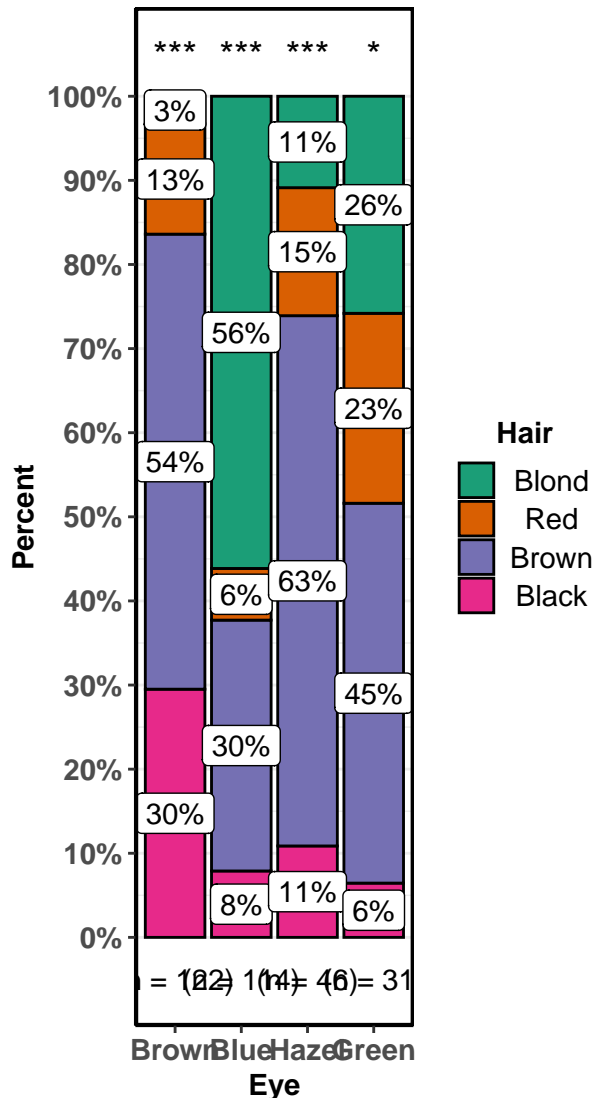
Sex: Male

28, $p = < 0.001$, $V_{\text{Cramer}} = 0.22$, $CI_{95\%} [0.14, 0.26]$, $n = 98$



Sex: Female

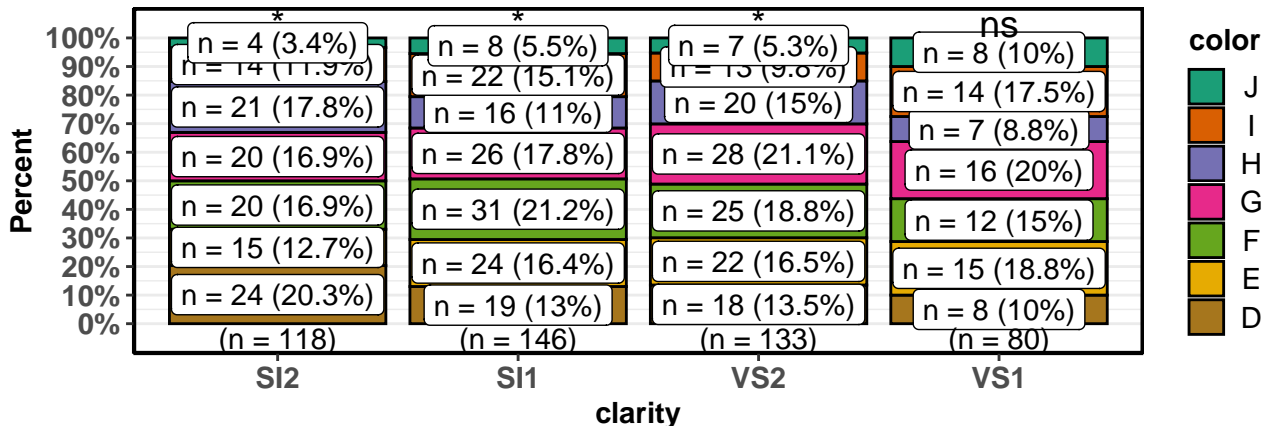
66, $p = < 0.001$, $V_{\text{Cramer}} = 0.34$, $CI_{95\%} [0.28, 0.38]$, $n = 122$



14, sampling = joint multinomial, $\text{fav} = 0.00$ null: $\log_e(BF_{01}) = -42.65$, sampling = joint multinomial, $a = 1.00$

Quality: Very Good

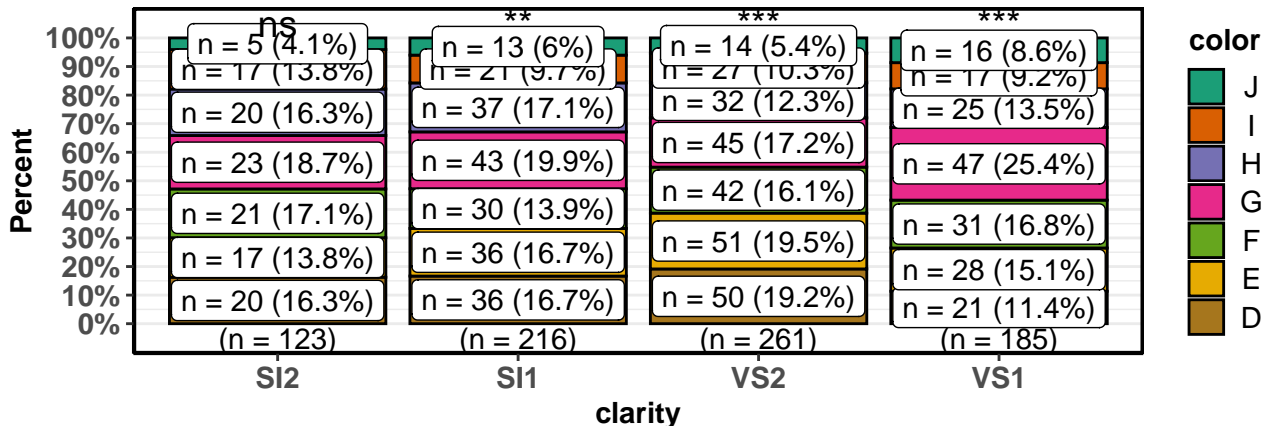
$\chi^2(18) = 17.95$, $p = 0.459$, $V_{\text{Cramer}} = 0.11$, $CI_{95\%} [0.02, 0.11]$, $n = 477$



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

Quality: Ideal

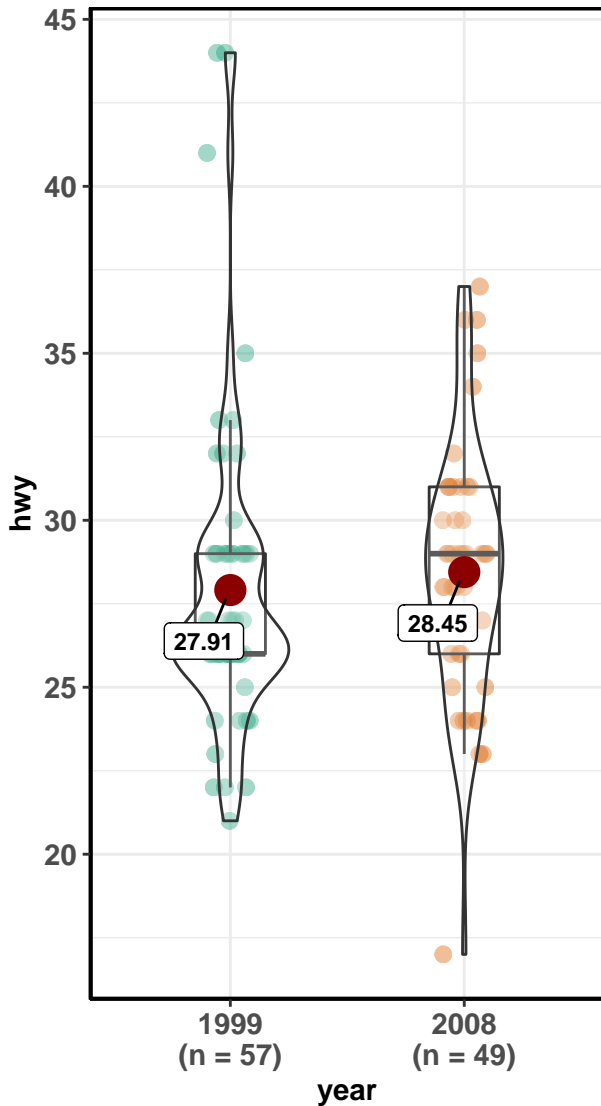
$\chi^2(18) = 17.85$, $p = 0.466$, $V_{\text{Cramer}} = 0.09$, $CI_{95\%} [0.02, 0.08]$, $n = 785$



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

drv: f

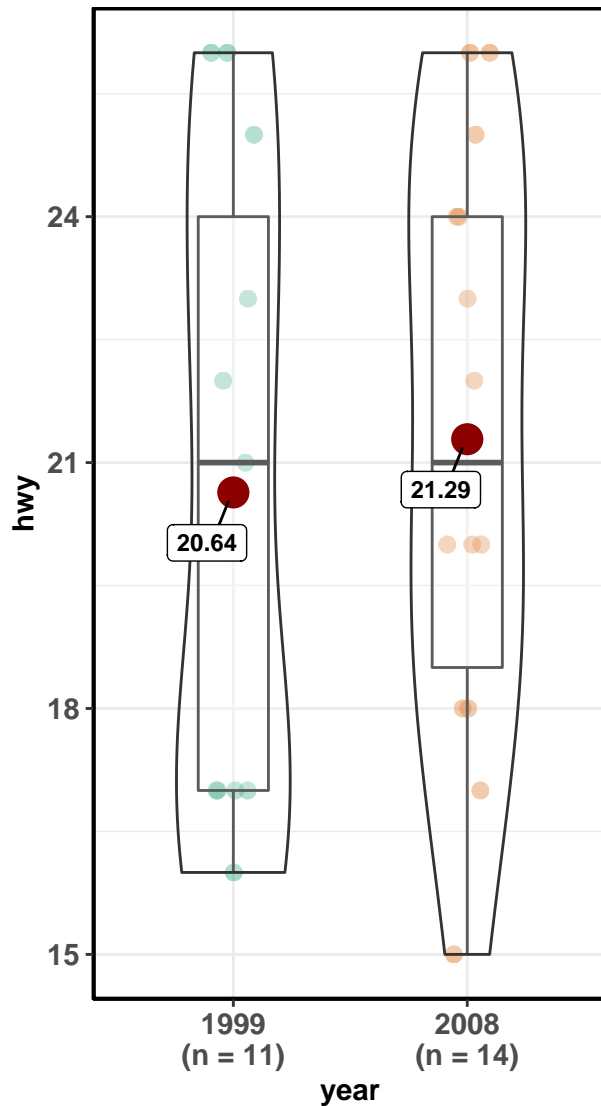
$t(20.71) = -0.66, p = 0.509, g = -0.13, CI_{99\%} [-0.63, 0.19]$



In favor of null: $\log_e(BF_{01}) = 1.39, r_{\text{Cauchy}} = 0.71$

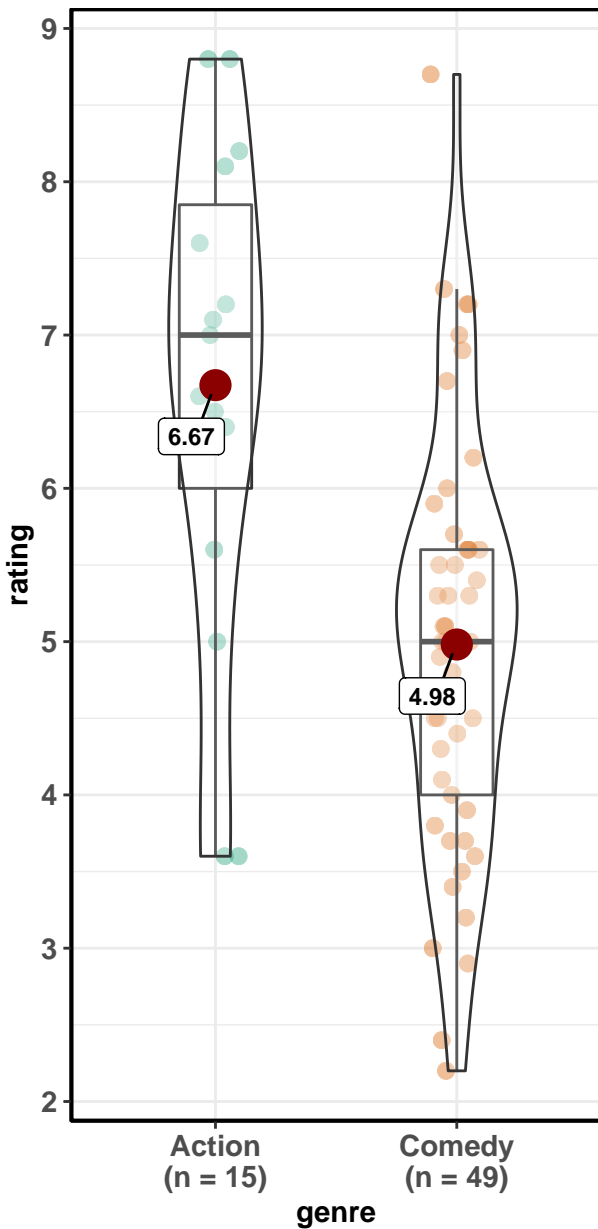
drv: r

$t(21.19) = -0.43, p = 0.675, g = -0.17, CI_{99\%} [-1.21, 0.8]$

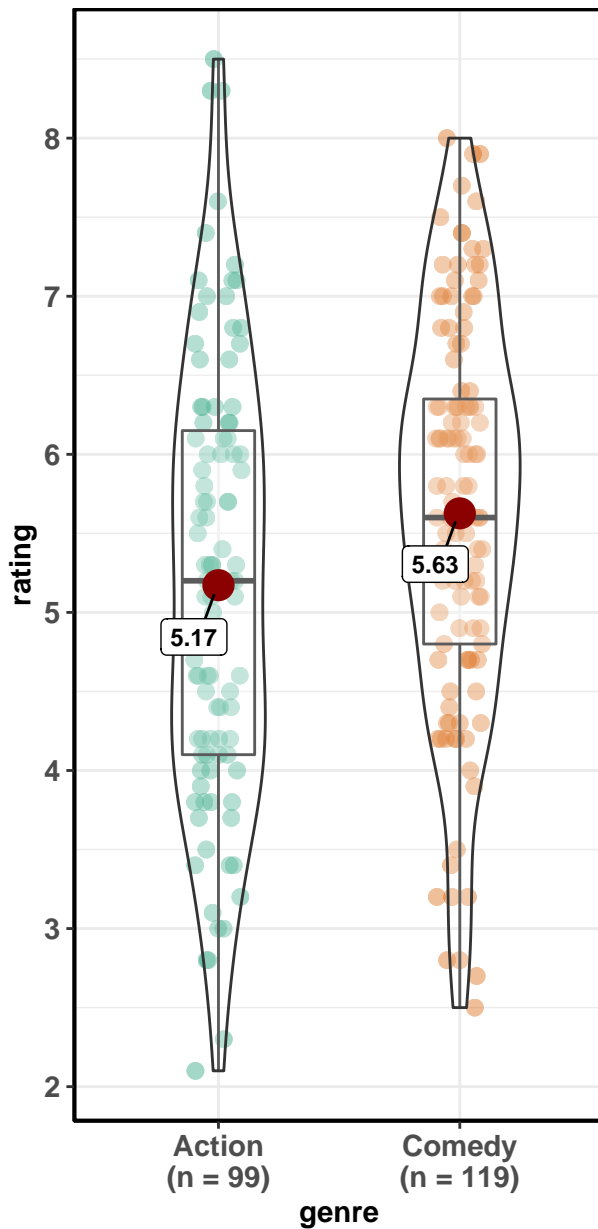


In favor of null: $\log_e(BF_{01}) = 0.93, r_{\text{Cauchy}} = 0.71$

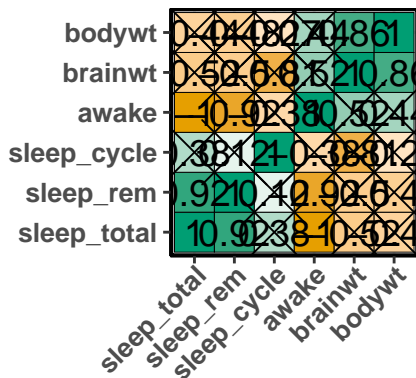
mpaa: PG



mpaa: R



vore: carni

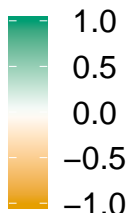


sample size:

$n_{\min} = 4$
 $n_{\text{median}} = 9$
 $n_{\max} = 19$

correlation:

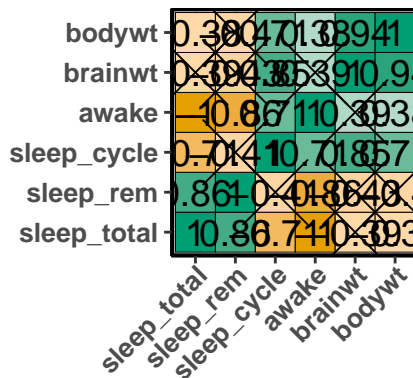
Pearson



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

Adjustment (p-value): None

vore: herbi

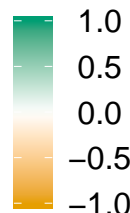


sample size:

$n_{\min} = 11$
 $n_{\text{median}} = 20$
 $n_{\max} = 32$

correlation:

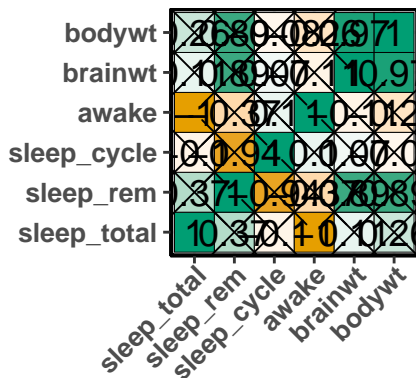
Pearson



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

Adjustment (p-value): None

vore: insecti

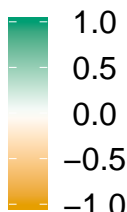


sample size:

$n_{\min} = 3$
 $n_{\text{median}} = 4$
 $n_{\max} = 5$

correlation:

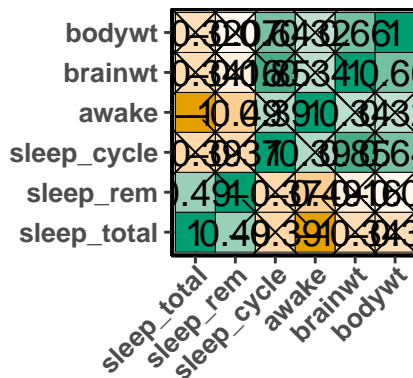
Pearson



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

Adjustment (p-value): None

vore: omni



sample size:

$n_{\min} = 11$
 $n_{\text{median}} = 17$
 $n_{\max} = 20$

correlation:

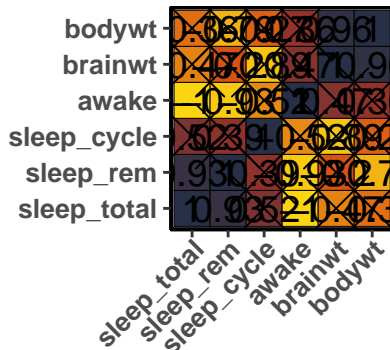
Pearson



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

Adjustment (p-value): None

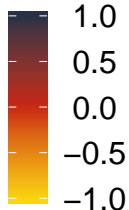
vore: carni



sample size:

$n_{\min} = 4$
 $n_{\text{median}} = 9$
 $n_{\max} = 19$

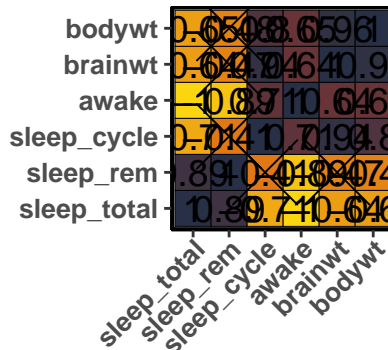
correlation:
 robust (% bend)



= correlation non-significant at $p < 0.05$

Adjustment (p-value): Holm

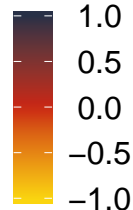
vore: herbi



sample size:

$n_{\min} = 11$
 $n_{\text{median}} = 20$
 $n_{\max} = 32$

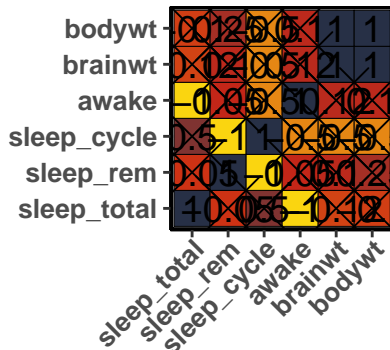
correlation:
 robust (% bend)



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

Adjustment (p-value): Holm

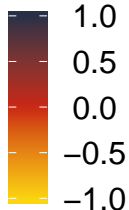
vore: insecti



sample size:

$n_{\min} = 3$
 $n_{\text{median}} = 4$
 $n_{\max} = 5$

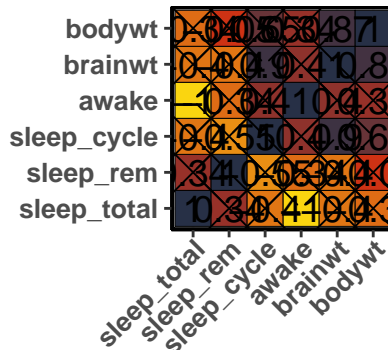
correlation:
 robust (% bend)



= correlation non-significant at $p < 0.05$

Adjustment (p-value): Holm

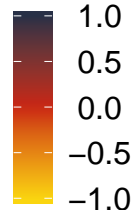
vore: omni



sample size:

$n_{\min} = 11$
 $n_{\text{median}} = 17$
 $n_{\max} = 20$

correlation:
 robust (% bend)

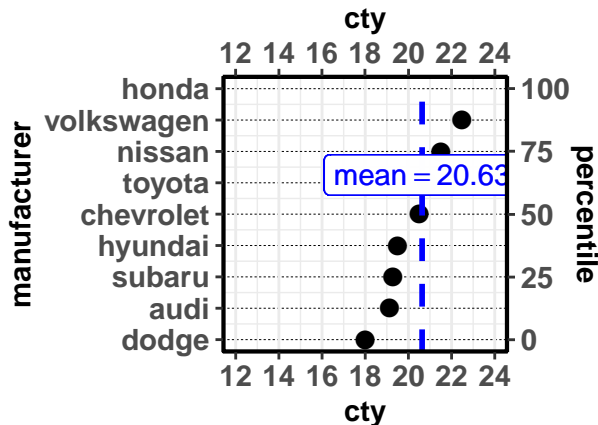


X = correlation non-significant at $p < 0.05$

Adjustment (p-value): Holm

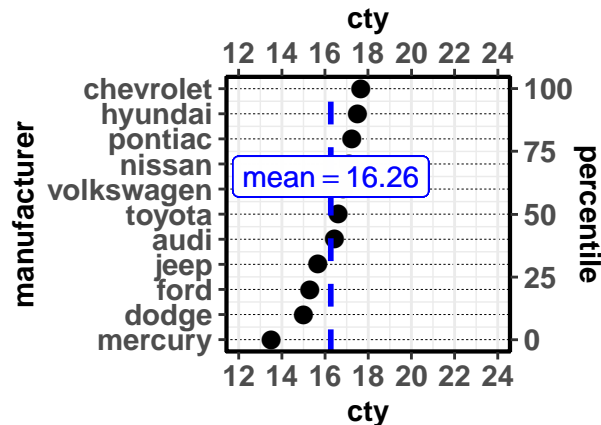
cylinder count: 4

$t(8) = 7.82, p = < 0.001, g = 2.32, CI_{95\%} [1.25, 4.25]$ $t(10) = 1.99, p = 0.075, g = 0.55, CI_{95\%} [-0.06, 1.29]$



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

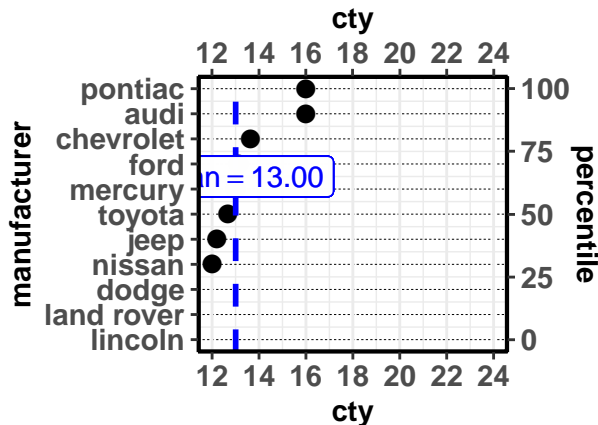
cylinder count: 6



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

cylinder count: 8

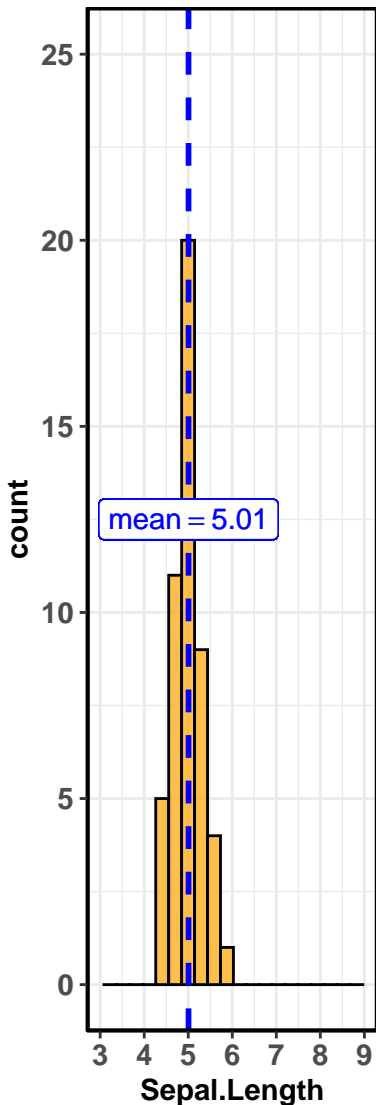
$t(8) = -5.01, p = 0.001, g = -1.38, CI_{95\%} [-2.49, -0.64], n = 11$



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

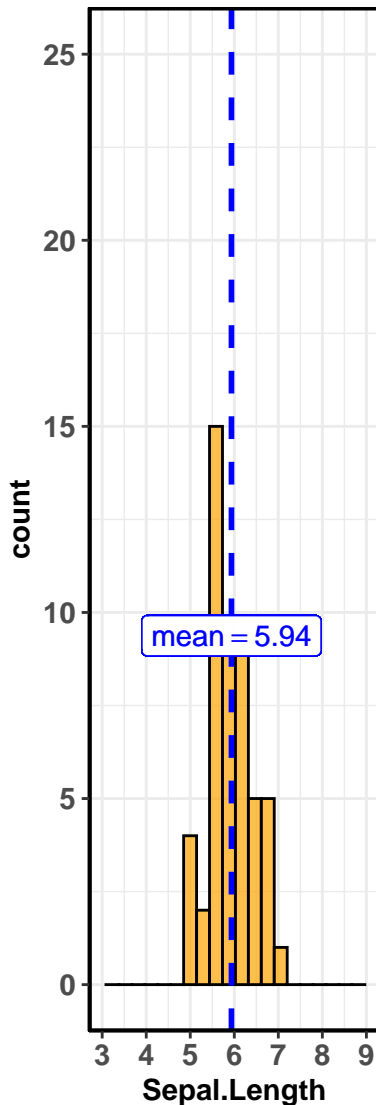
Species: setosa

12, $p = 0.905$, $g = 0.02$, $CI_{95\%} = [-0.49, 1.53]$



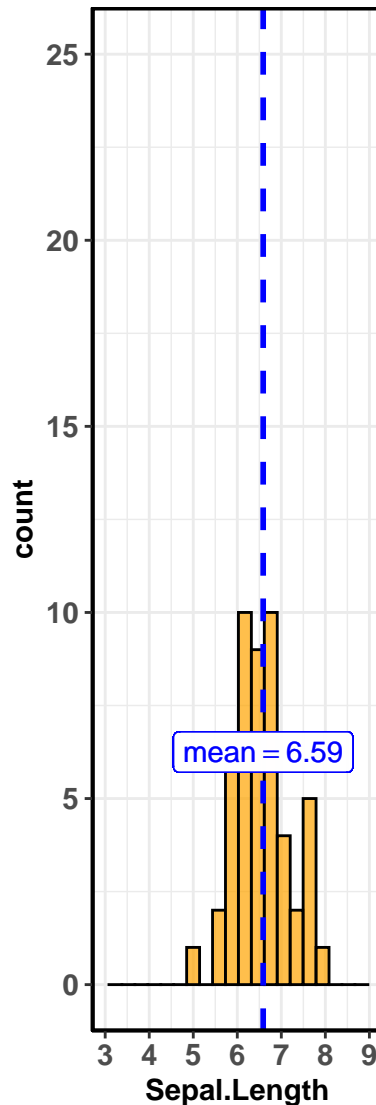
Species: versicolor

12, $p = < 0.001$, $g = 1.78$, $CI_{95\%} = [1.49, 2.07]$



Species: virginica

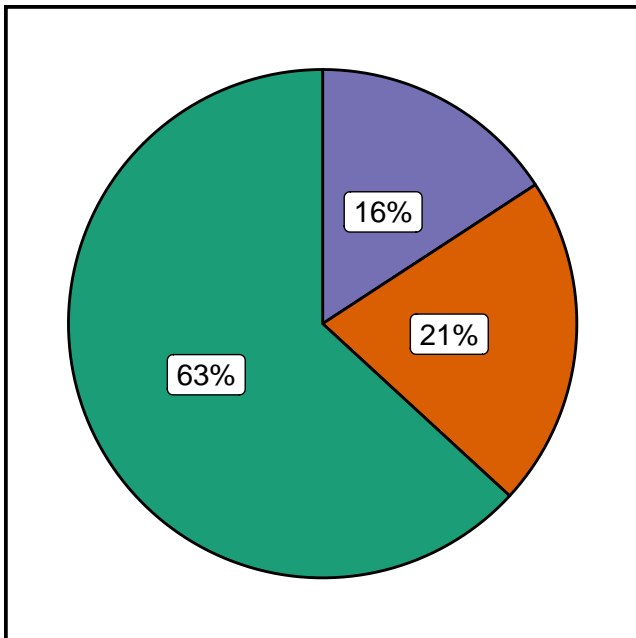
12, $p = < 0.001$, $g = 2.46$, $CI_{95\%} = [1.99, 2.93]$



of null: $\log_e(BF_{01}) = 1.86$, $r_{Cauchy} = 0.71$ of null: $\log_e(BF_{01}) = -32.95$, $r_{Cauchy} = 0.71$ of null: $\log_e(BF_{01}) = -45.50$, $r_{Cauchy} = 0.71$

am: 0

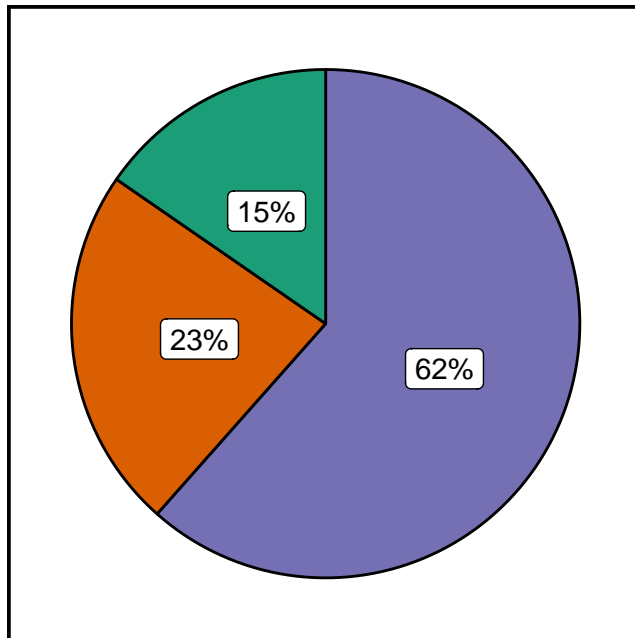
$\chi^2(2) = 7.68, p = 0.021, V_{\text{Cramer}} = 0.45, \text{CI}_{95\%} [0.05, 0.74]$



cyl  8  6  4

am: 1

$\chi^2(2) = 4.77, p = 0.092, V_{\text{Cramer}} = 0.43, \text{CI}_{95\%} [0.00, 0.78], n = 10$

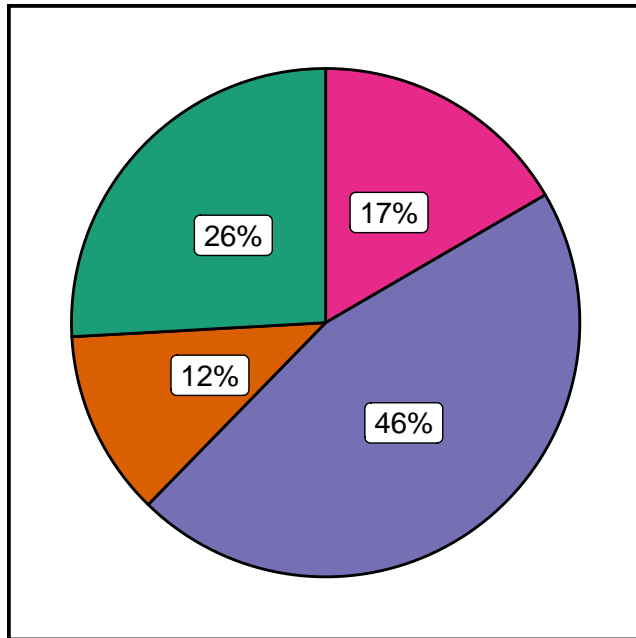
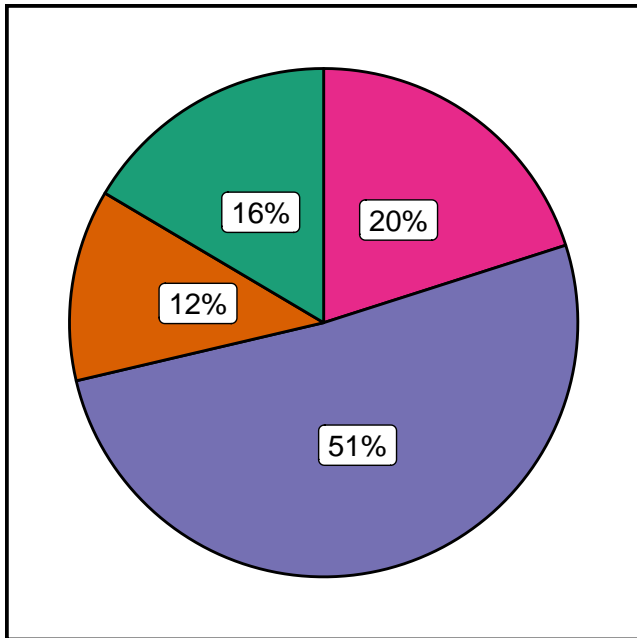










cyl  8  6  4

Sex: Male

Sex: Female

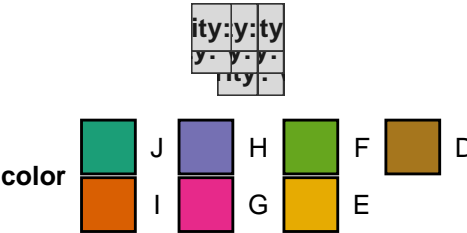
$\chi^2 = 106.05, p = < 0.001, V_{\text{Cramer}} = 0.36, \text{CI}_{95\%} [0.28, 0.42], n = 423$ $\chi^2 = 84.23, p = < 0.001, V_{\text{Cramer}} = 0.30, \text{CI}_{95\%} [0.23, 0.36], n = 423$



Hair  Blond  Red  Brown  Black **Hair**  Blond  Red  Brown  Black

Quality: Fair

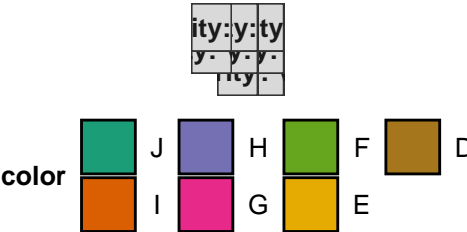
$\chi^2(42) = 55.71, p = 0.076, V_{\text{Cramer}} = 0.23, \text{Cl}_{95\%} [0.11, 0.21], n = 172$



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

Quality: Very Good

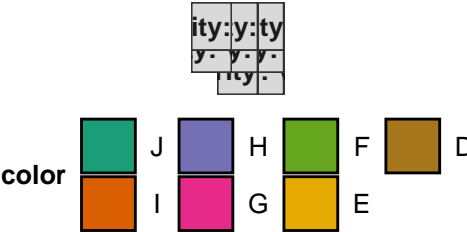
$\chi^2(42) = 64.05, p = 0.016, V_{\text{Cramer}} = 0.10, \text{Cl}_{95\%} [0.04, 0.08], n = 1187$



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

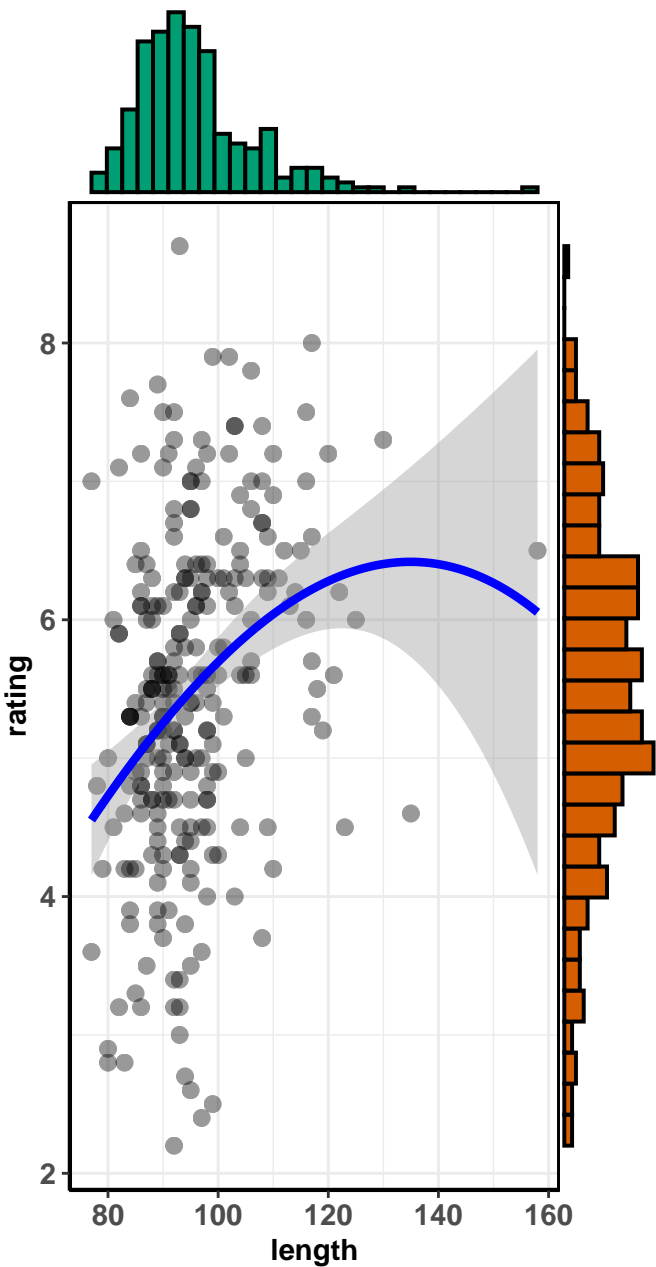
Quality: Ideal

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

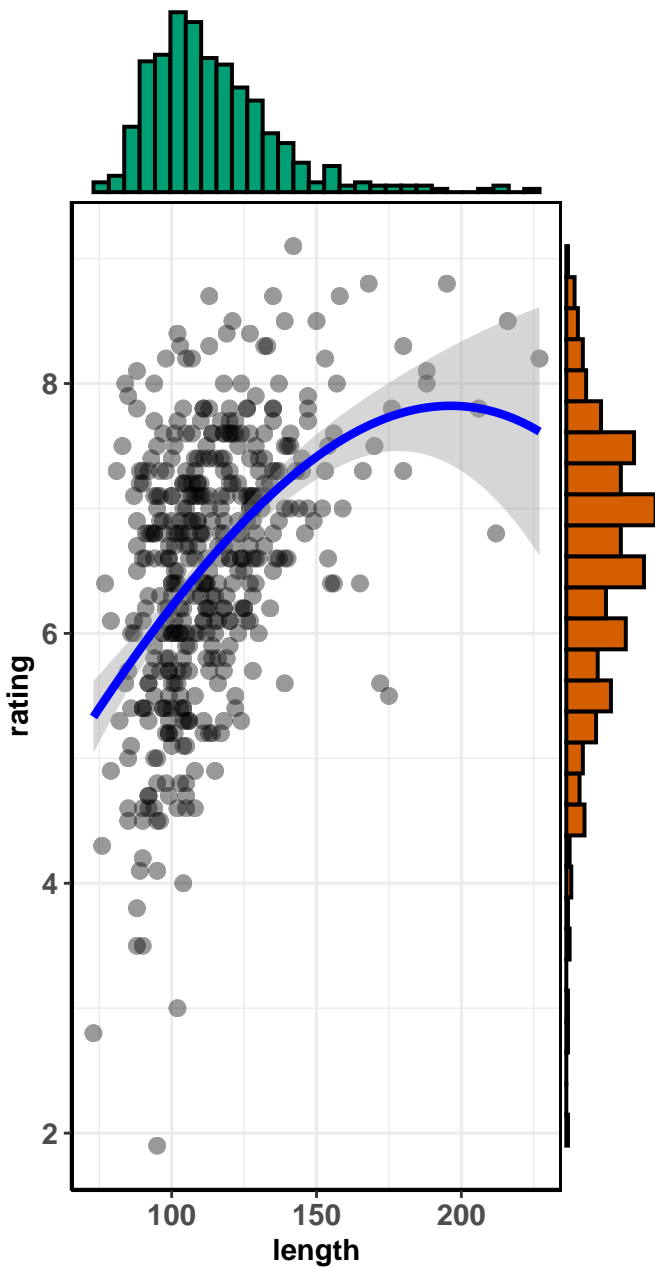


avor of null: $\log_e(\text{BF}_{01}) = -25.04$, sampling = poisson, $a = 1.00$

genre: Comedy

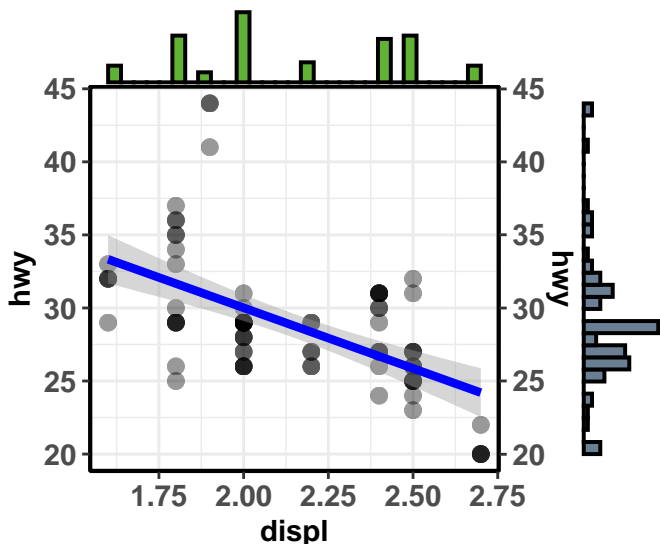


genre: Drama



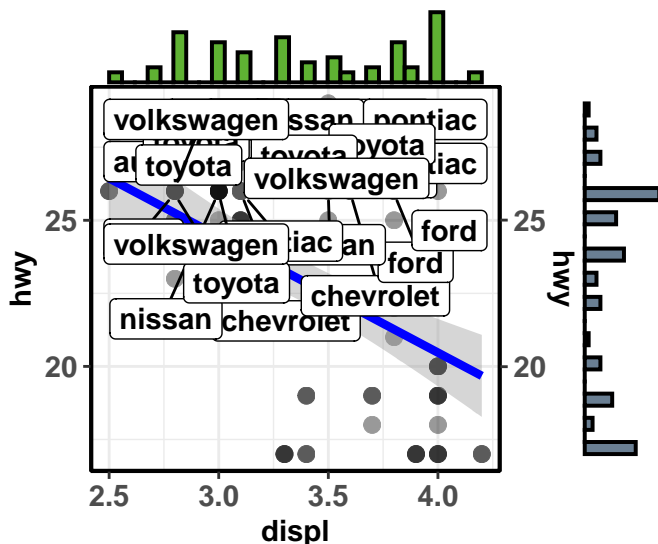
Cylinder count: 4

< 0.001 , $\rho_{pb} = -0.61$, $CI_{95\%} [-0.$



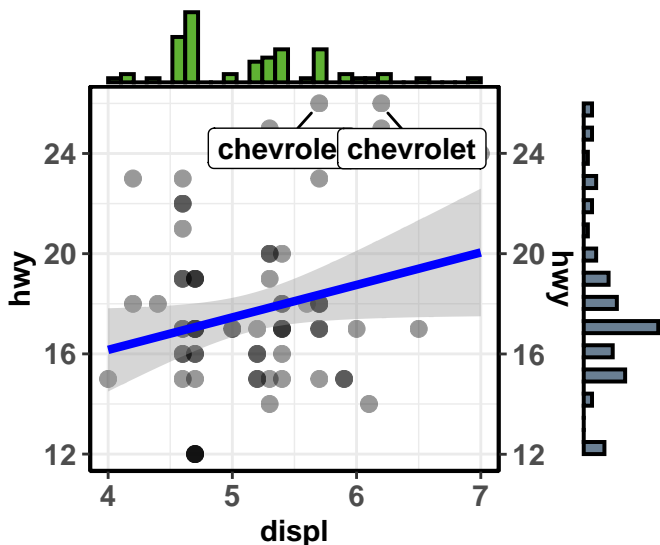
Cylinder count: 6

< 0.001 , $\rho_{pb} = -0.50$, $CI_{95\%} [-0.$



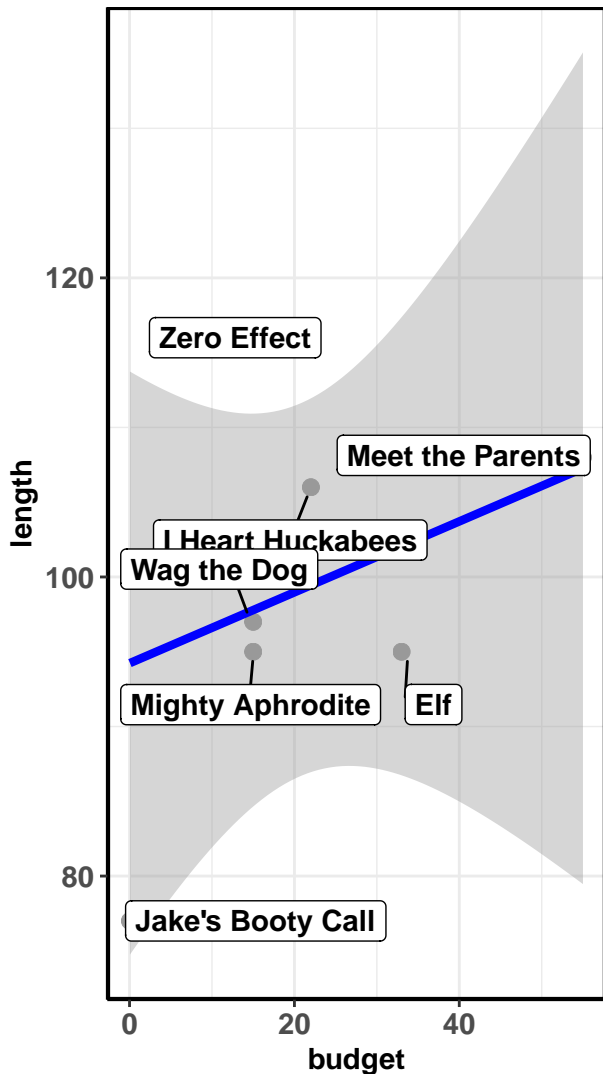
Cylinder count: 8

$= 0.216$, $\rho_{pb} = 0.15$, $CI_{95\%} [-0.1$



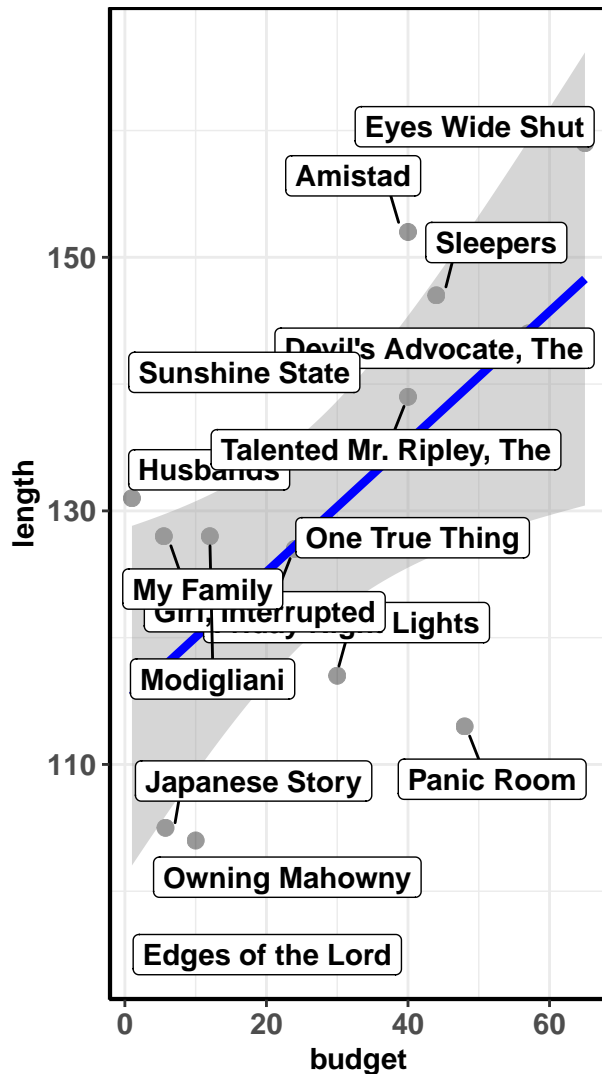
Genre: Comedy

$t(14) = 0.84, p = 0.439, r_{\text{Pearson}} = 0.35, \text{CI}_{95\%} [-0.55, 0.14]$



Genre: Drama

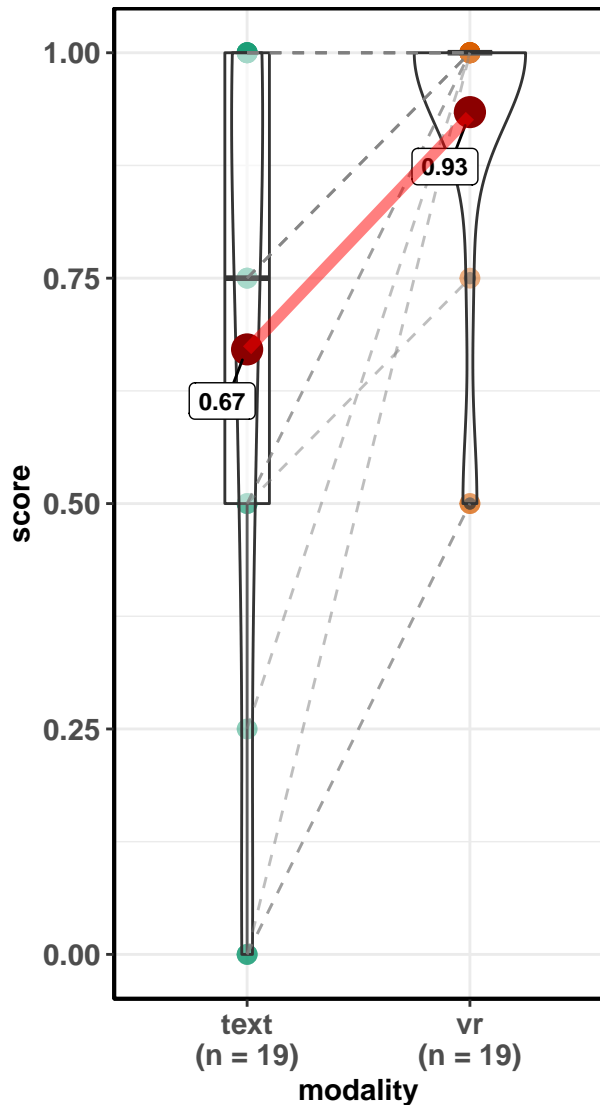
$t(14) = 2.67, p = 0.018, r_{\text{Pearson}} = 0.58, \text{CI}_{95\%} [0.12, 0.84]$



All movies have IMDB rating equal to 7.

order: 0

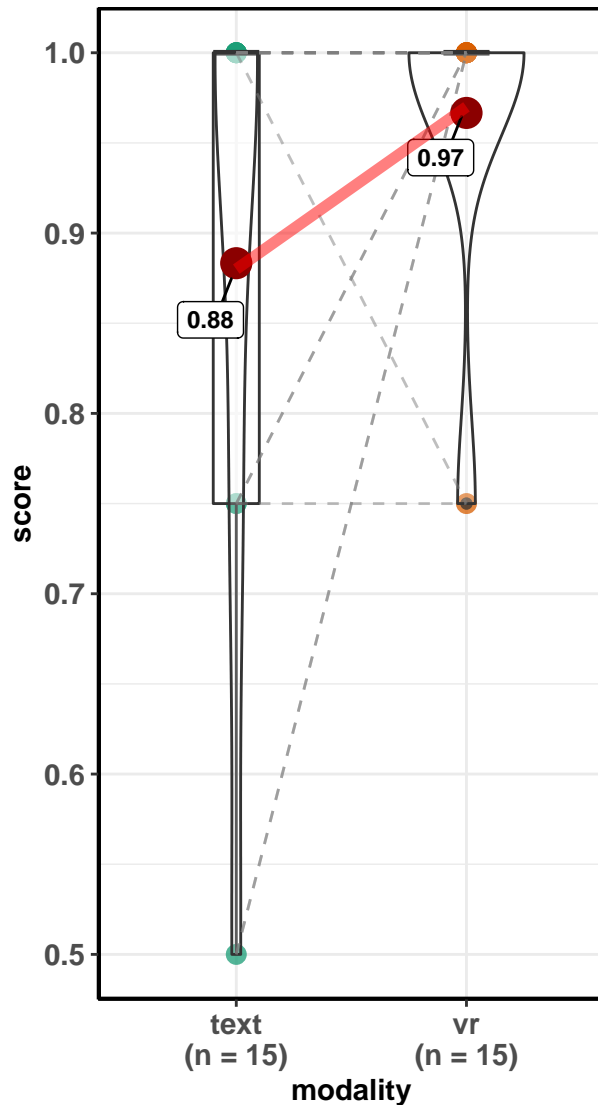
$18) = -3.90, p = 0.001, g = -0.85, CI_{95\%} [-1.46, -0.14]$



In favor of null: $\log_e(BF_{01}) = -3.56, r_{\text{Cauchy}} = 0.71$

order: 1

$14) = -1.58, p = 0.136, g = -0.38, CI_{95\%} [-0.96, 0.13]$



In favor of null: $\log_e(BF_{01}) = 0.32, r_{\text{Cauchy}} = 0.71$

