

# Dataset: Iris Flower dataset

(a) setosa

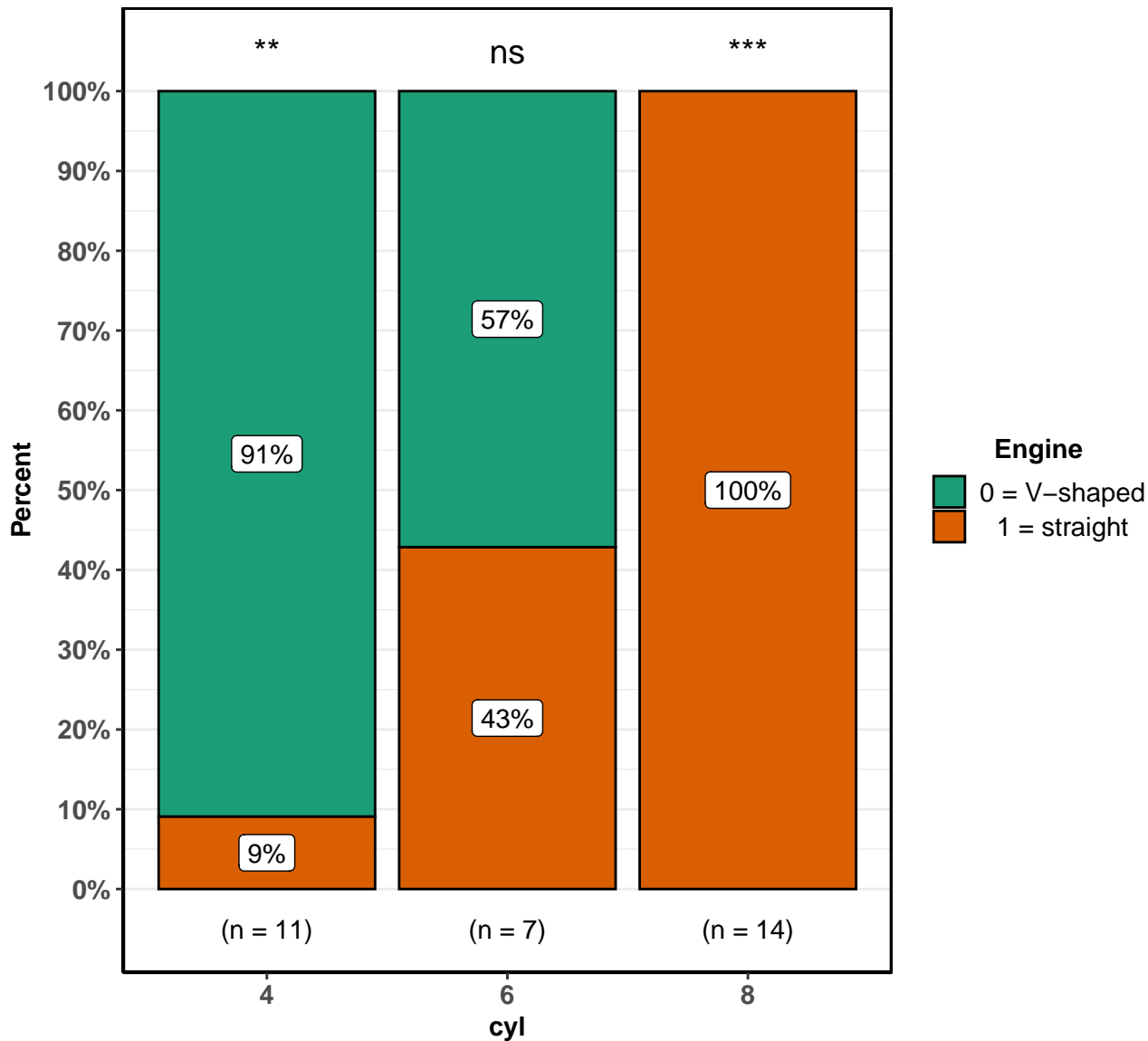


(b) versicolor



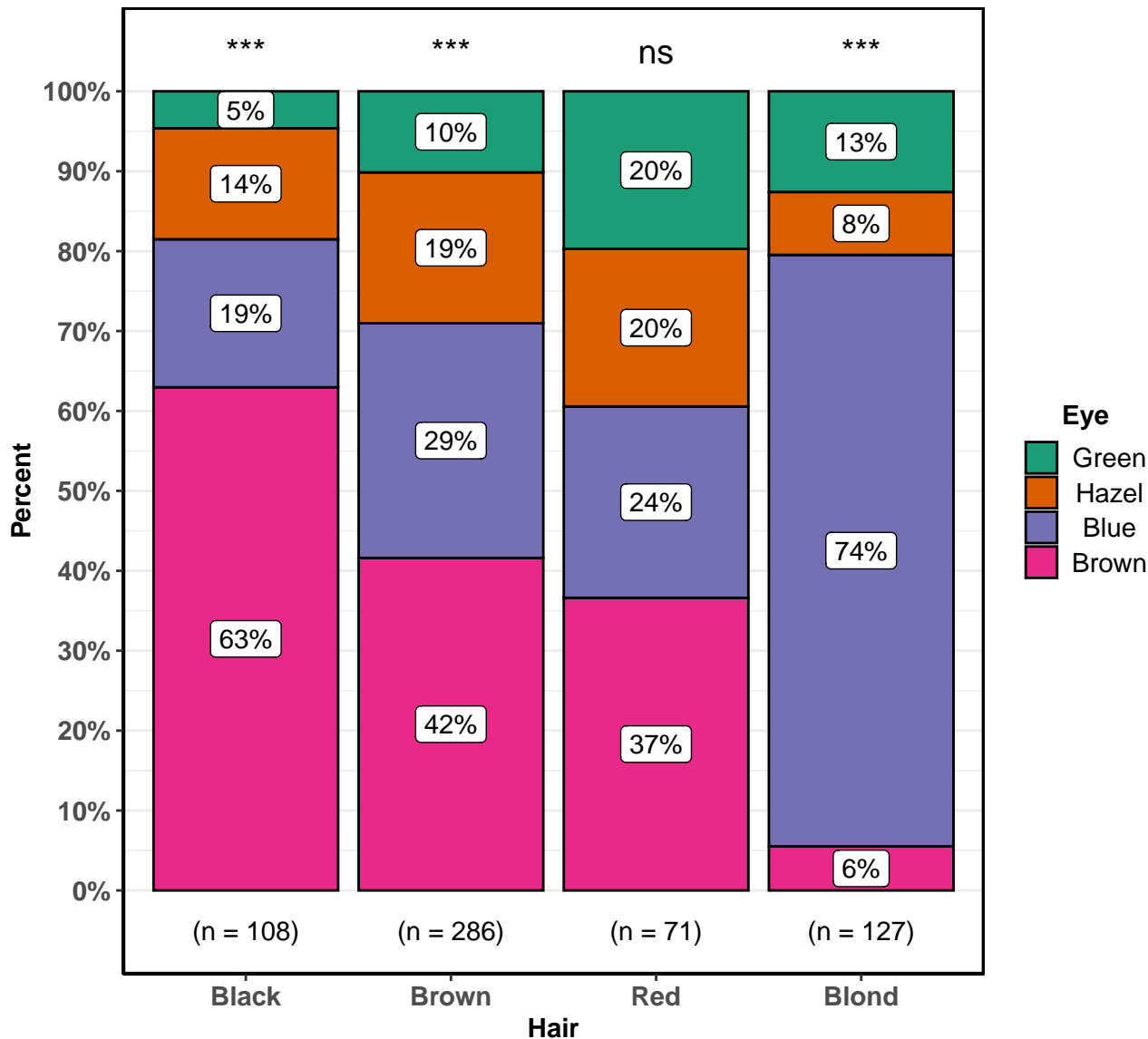
Note: Only two species of flower are displayed

$\chi^2_{\text{Pearson}}(2) = 21.34, p = < 0.001, V_{\text{Cramer}} = 0.82, \text{CI}_{95\%} [0.67, 0.87], n_{\text{obs}} = 32$



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

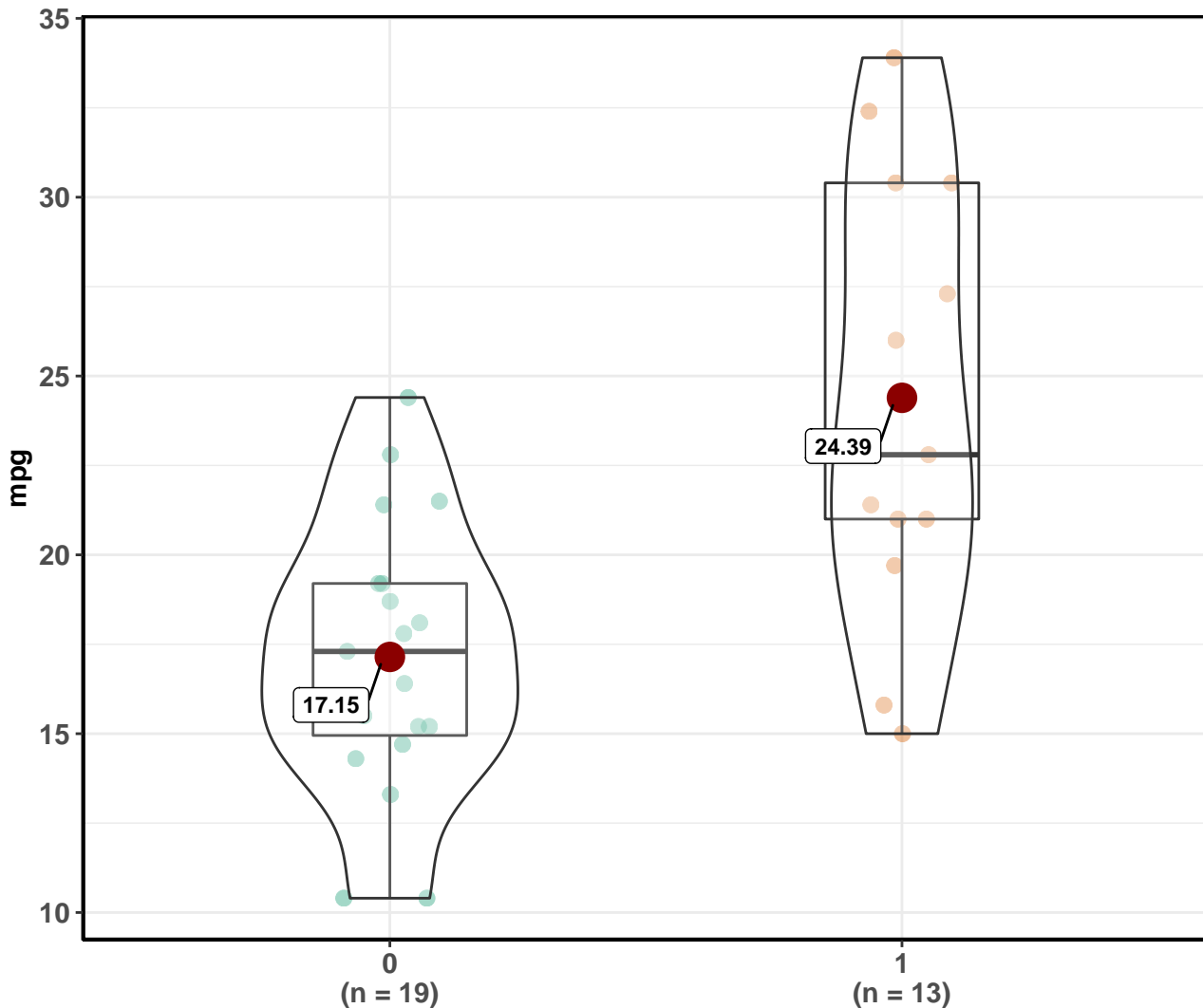
$\chi^2_{\text{Pearson}}(9) = 138.29, p = < 0.001, V_{\text{Cramer}} = 0.28, \text{CI}_{95\%} [0.23, 0.31], n_{\text{obs}} = 592$



In favor of null:  $\log_e(\text{BF}_{01}) = -56.78$ , sampling = independent multinomial,  $a = 1.00$

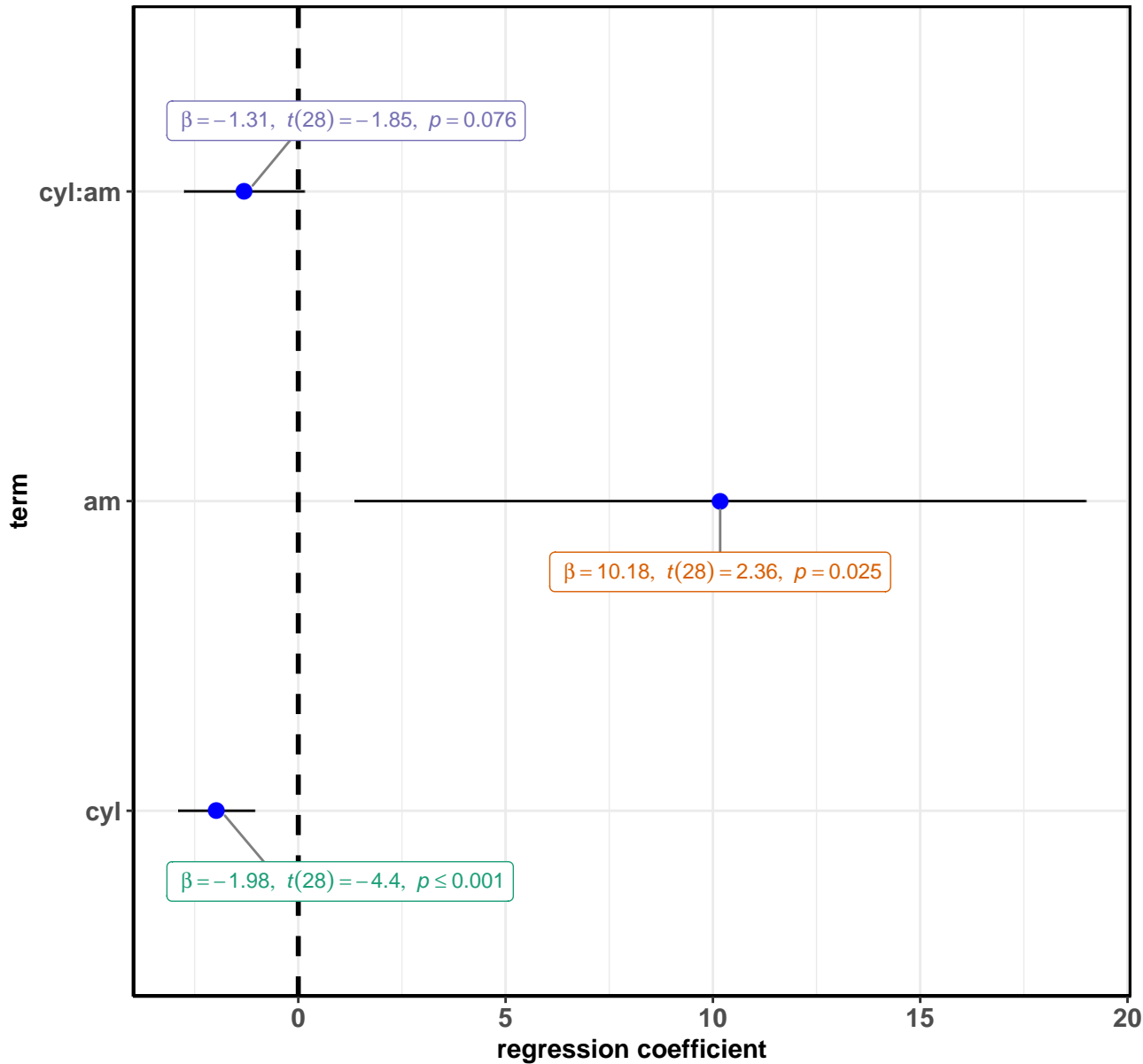
# Fuel efficiency by type of car transmission

$t(18.33) = -3.77, p = 0.001, g = -1.38, CI_{95\%} [-2.17, -0.51], n_{obs} = 32$

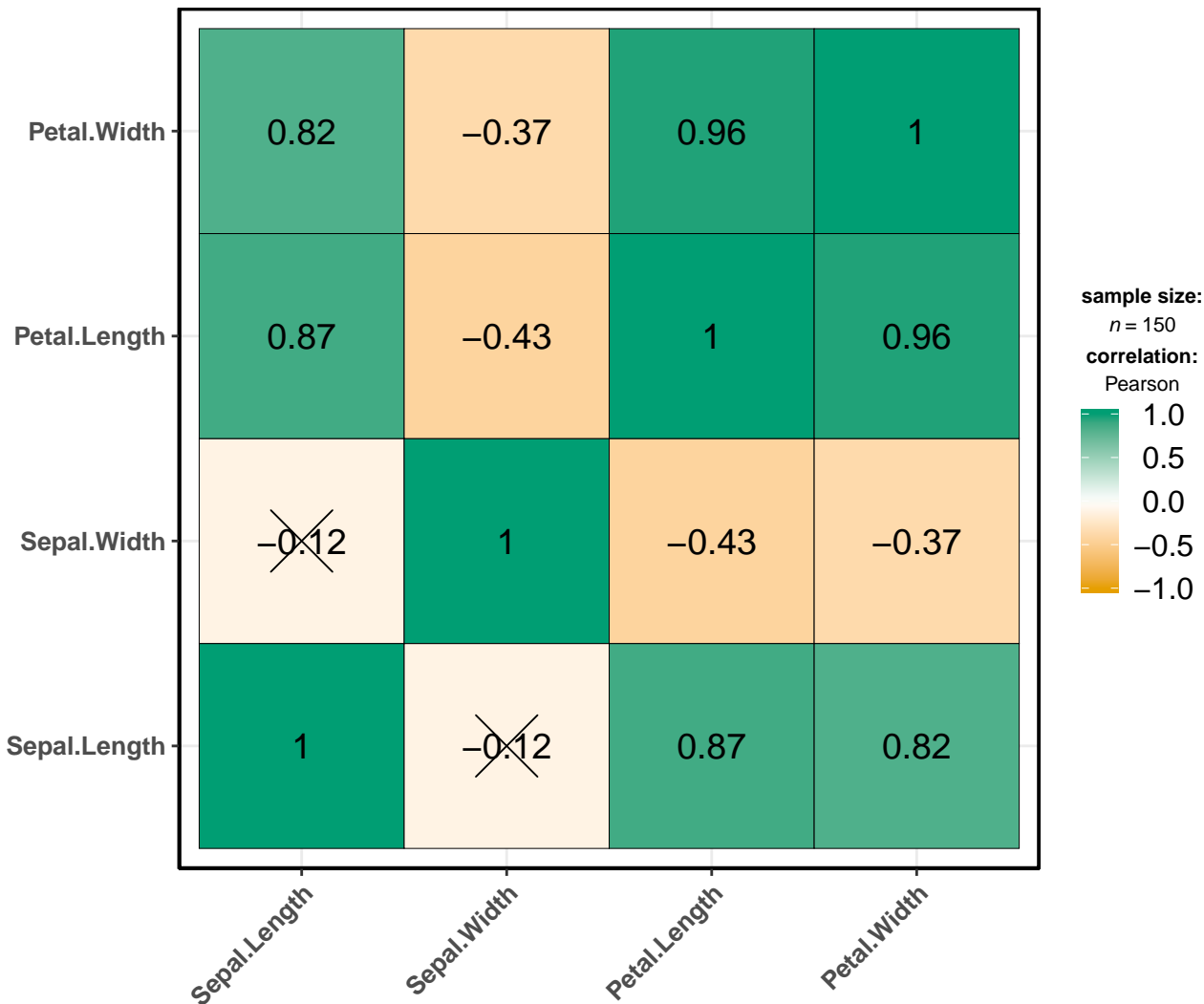


Transmission (0 = automatic, 1 = manual)

In favor of null:  $\log_e(BF_{01}) = -4.46, r_{Cauchy}^{JZS} = 0.71$

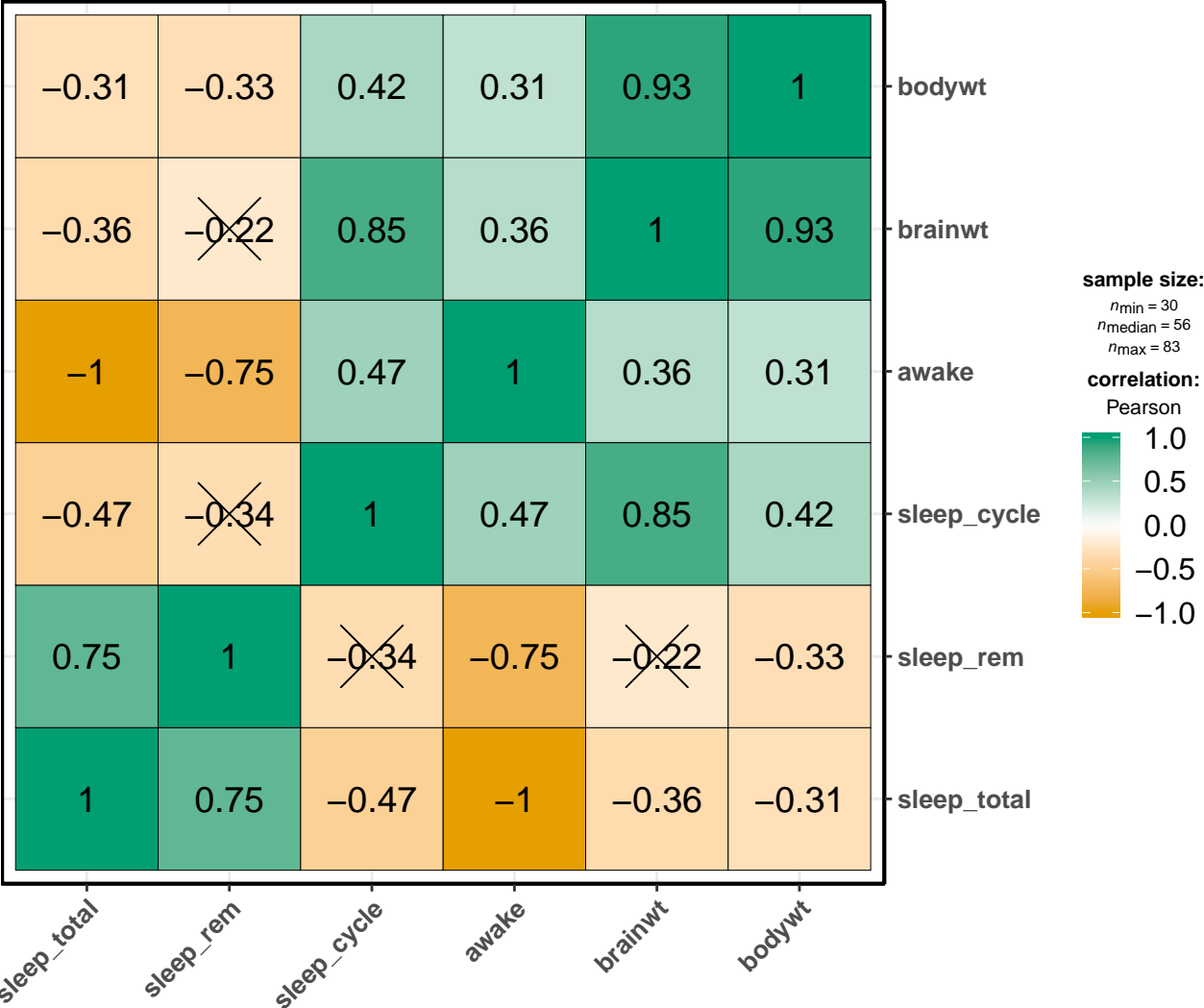


AIC = 166, BIC = 173, log-likelihood = -78



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

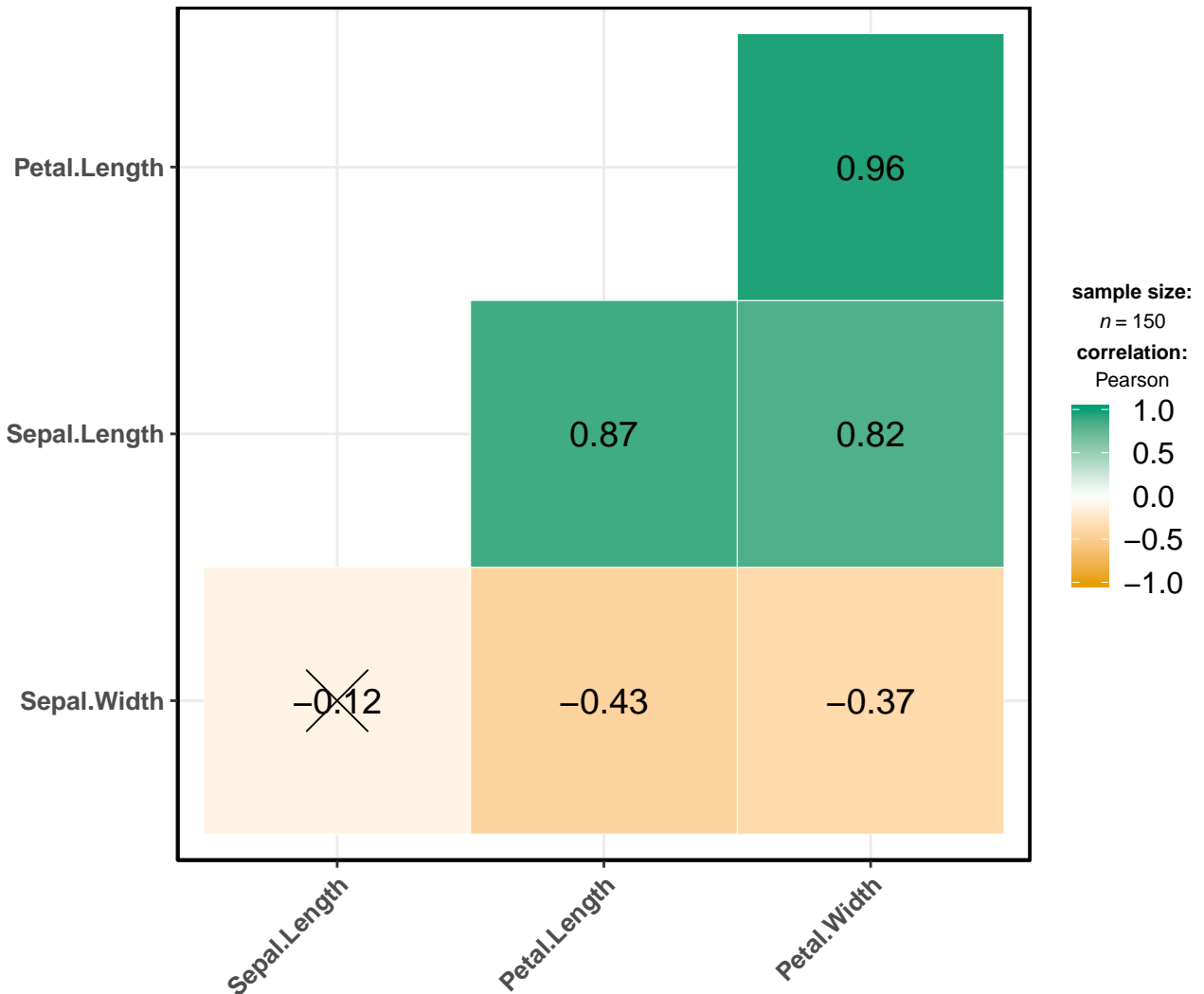
Adjustment (p-value): None



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

Adjustment (p-value): None

Dataset: Iris



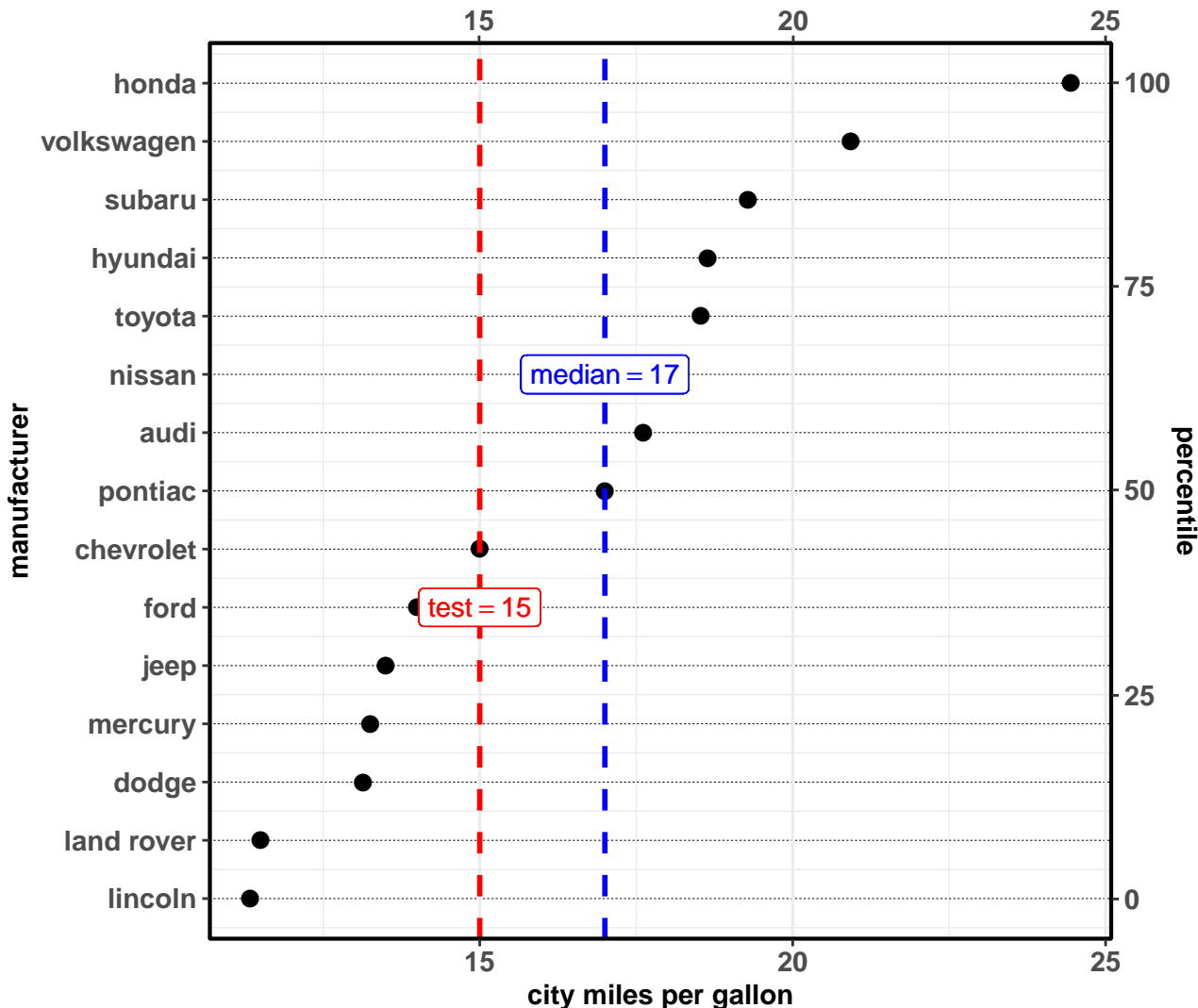
X = correlation non-significant at  $p < 0.01$

Adjustment (p-value): None



# Fuel economy data

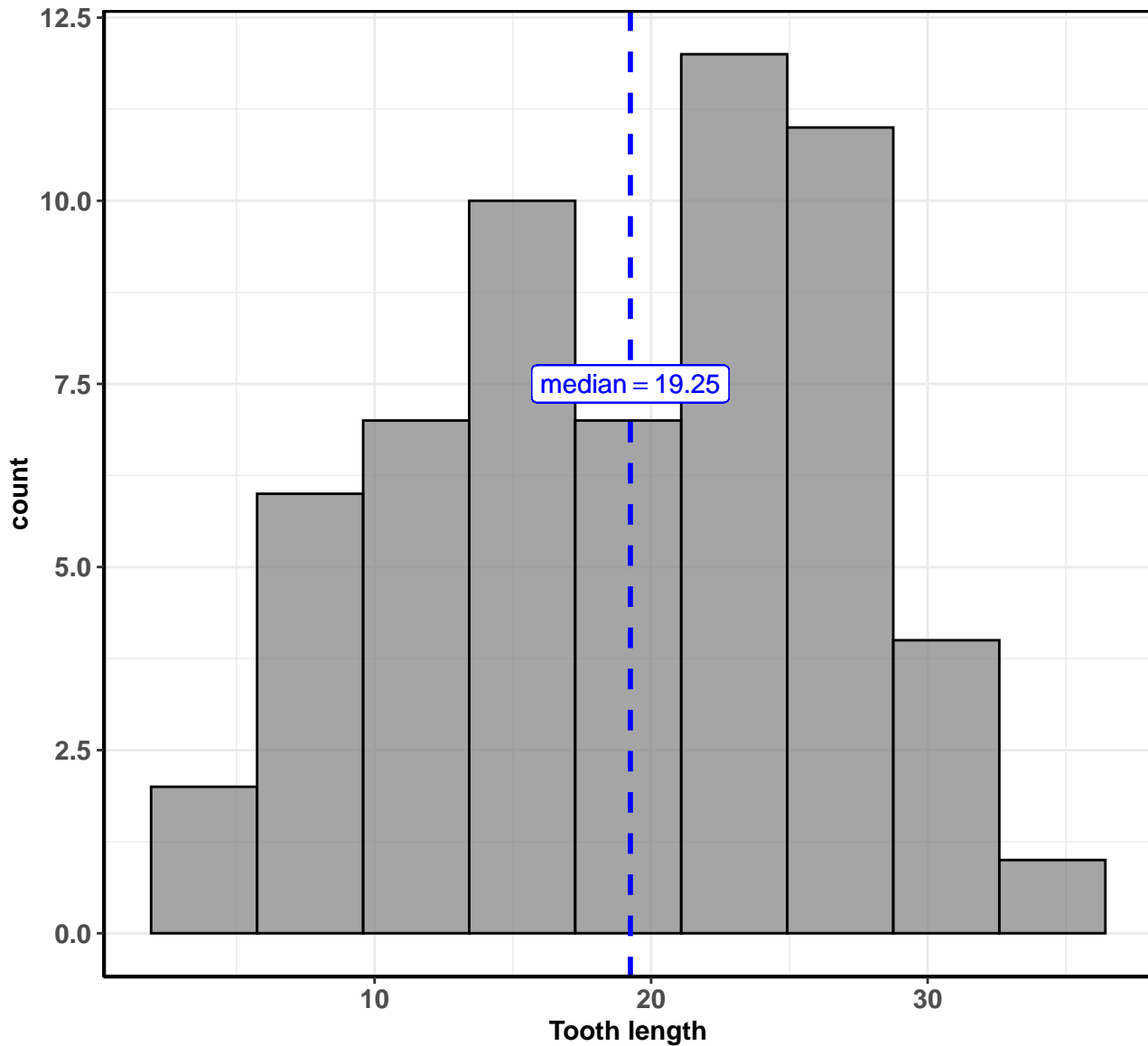
$t(14) = 1.47$ ,  $p = 0.163$ ,  $g = 0.36$ ,  $CI_{99\%} [-0.33, 1.10]$ ,  $n_{obs} = 15$



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

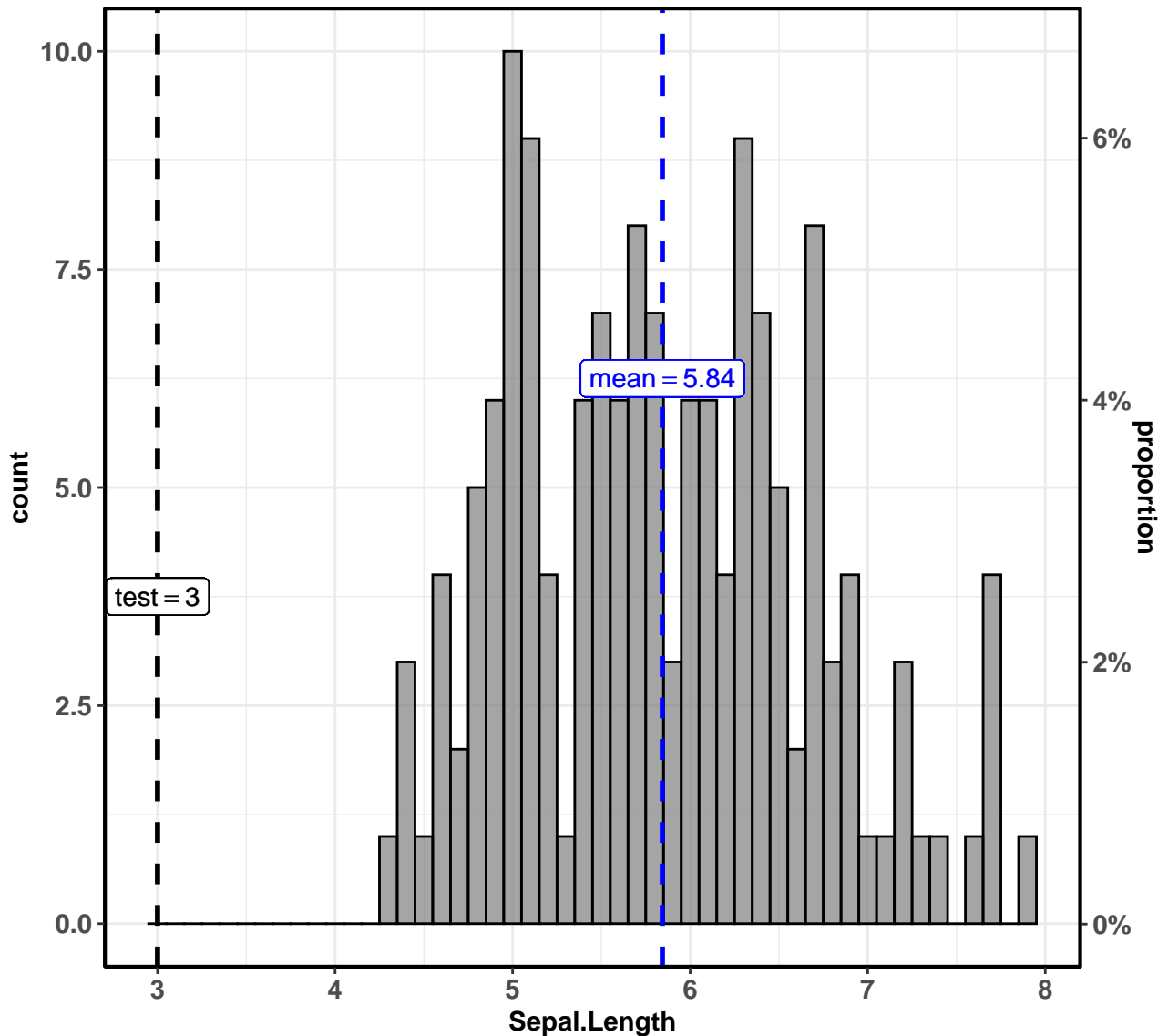
In favor of null:  $\log_e(BF_{01}) = 0.44$ ,  $r_{Cauchy}^{JZS} = 0.71$

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



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

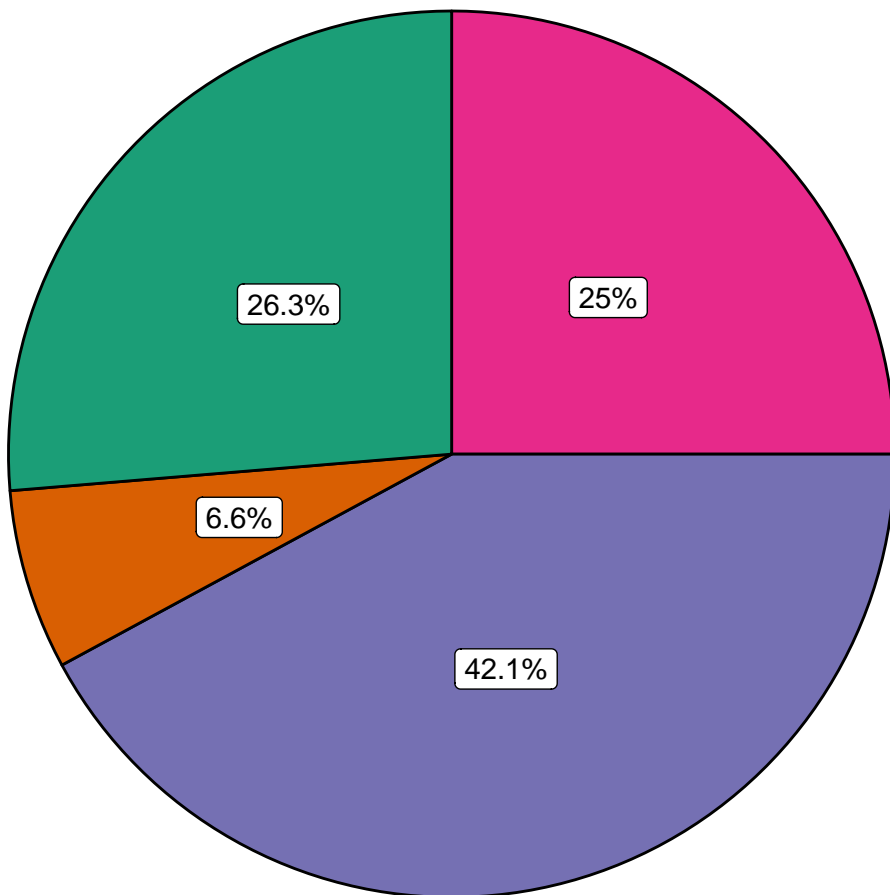
$t(149) = 42.05, p = < 0.001, g = 3.42, CI_{95\%} [3.02, 3.86], n_{\text{obs}} = 150$







Note: Iris dataset by Fisher.

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

$\chi^2_{\text{gof}}(3) = 19.263$ ,  $p = < 0.001$ ,  $V_{\text{Cramer}} = 0.291$ ,  $\text{CI}_{95\%} [0.181, 0.366]$ ,  $n_{\text{obs}} = 76$

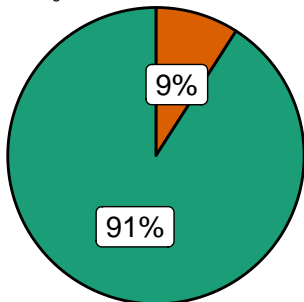


**vore**  **omni**  **insecti**  **herbi**  **carni**

$\chi^2_{\text{Pearson}}(2) = 21.34, p = < 0.001, V_{\text{Cramer}} = 0.82, \text{CI}_{95\%} [0.57, 0.94], n_{\text{obs}} = 32$

4

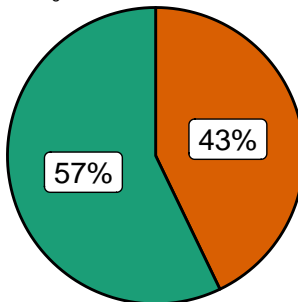
$\chi^2_{\text{gof}}(1) = 7.36, p = 0.007$



(n = 11)

6

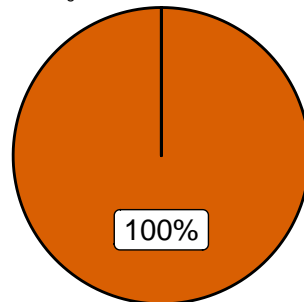
$\chi^2_{\text{gof}}(1) = 0.14, p = 0.705$



(n = 7)

8

$\chi^2_{\text{gof}}(1) = 14, p \leq 0.001$

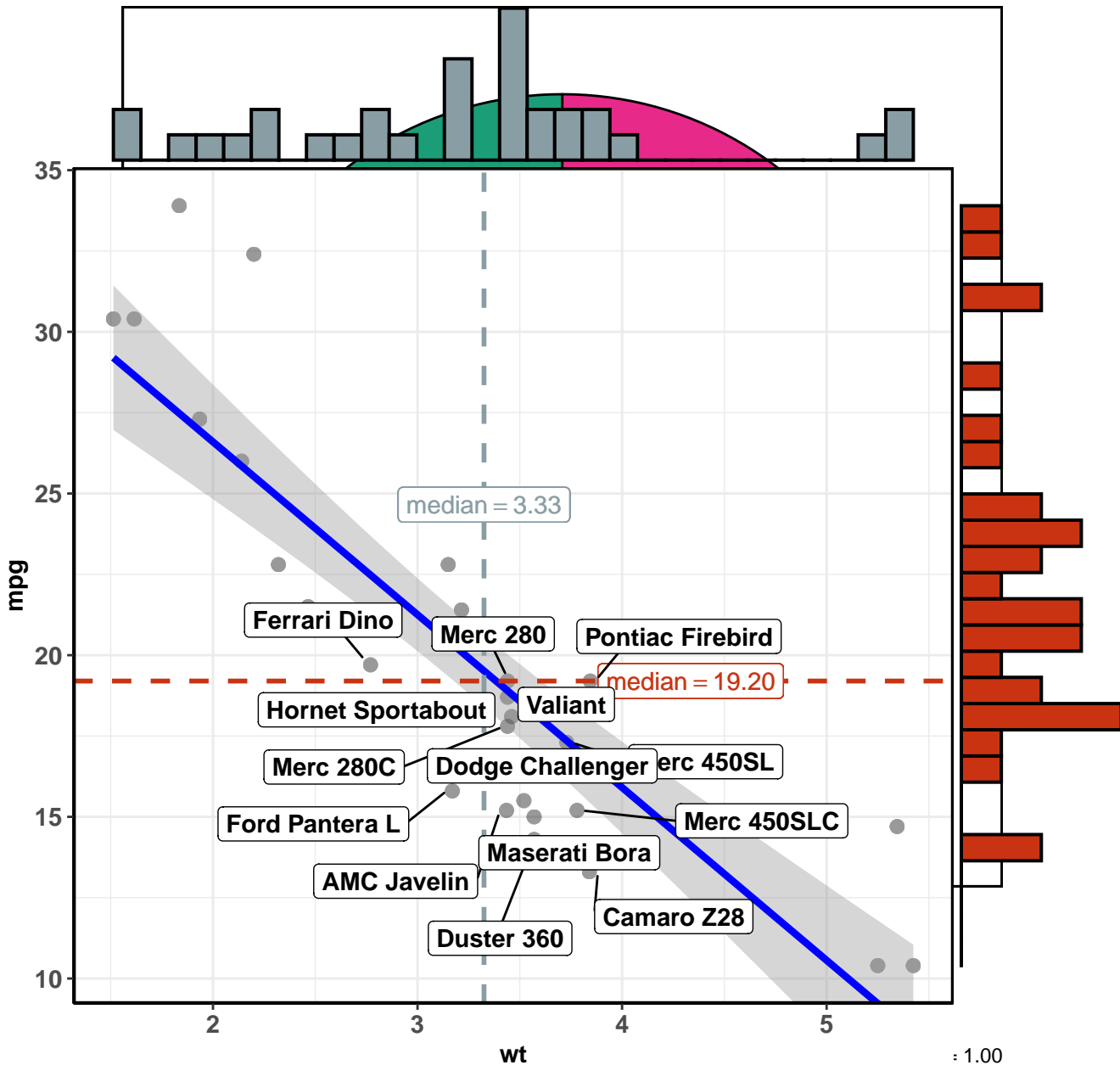


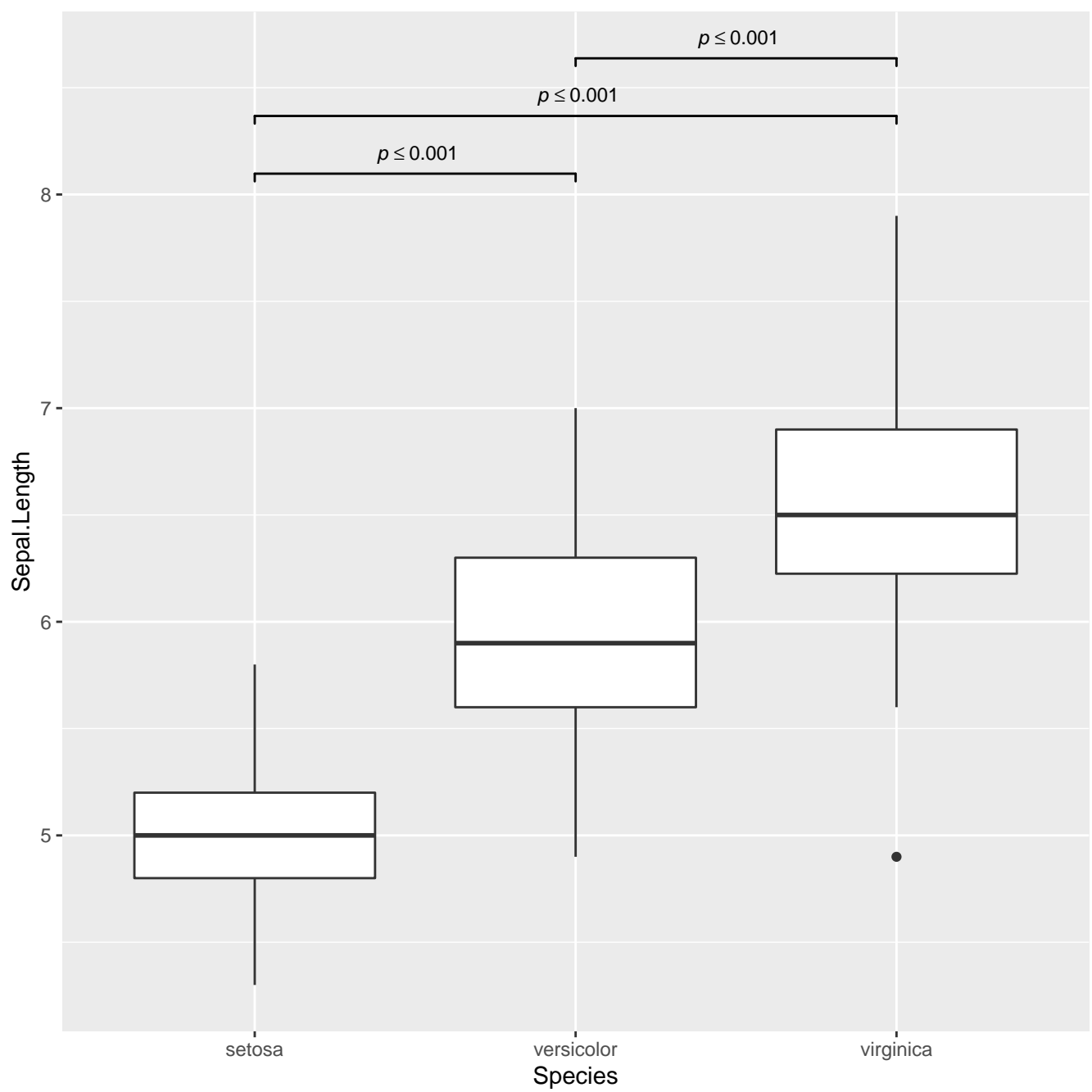
(n = 14)

Engine  0 = V-shaped  1 = straight

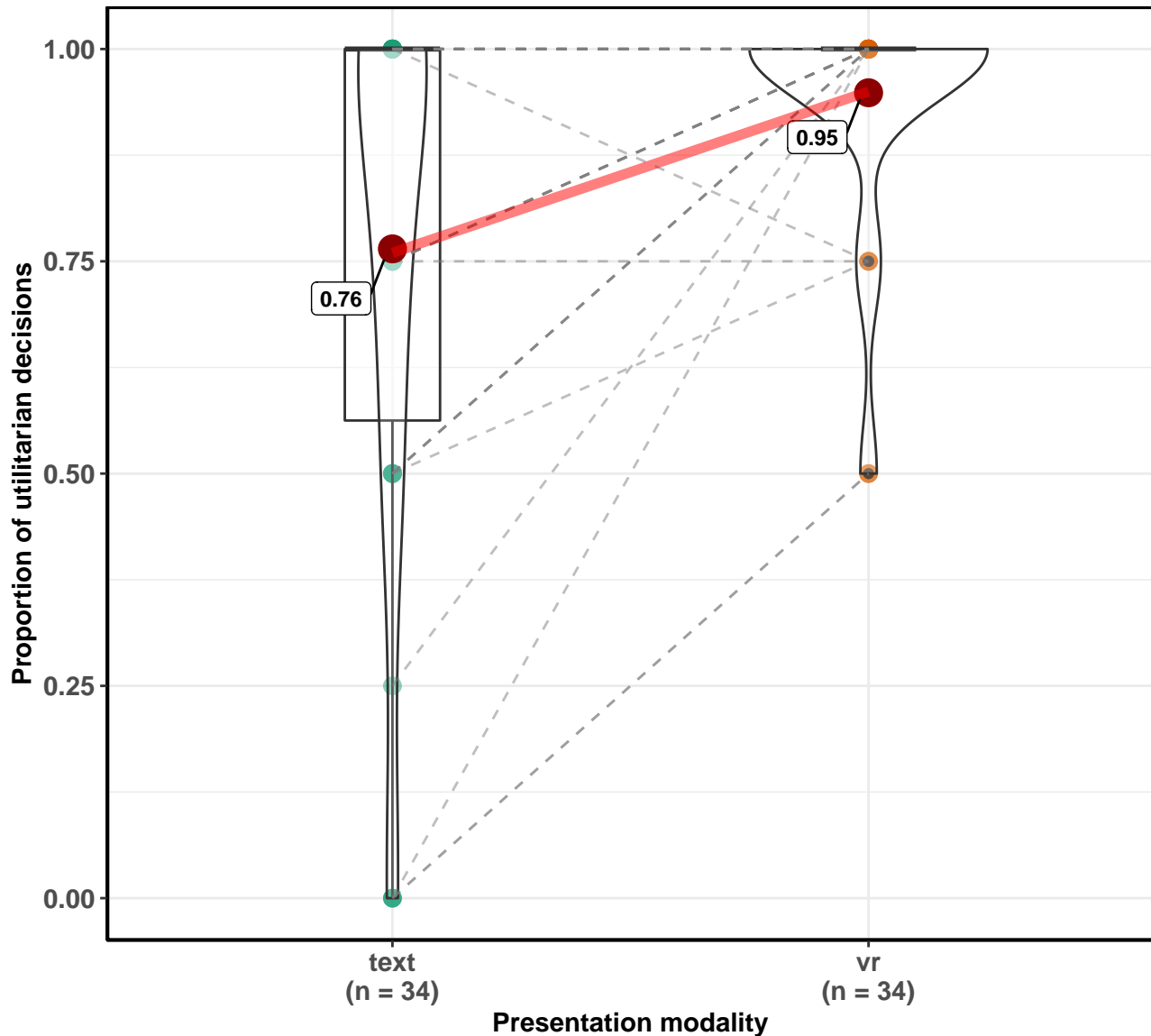
In favor of null:  $\log_e(\text{BF}_{01}) = -10.31$ , sampling = independent multinomial,  $a = 1.00$

$\log_e(S) = 9.24$ ,  $p = < 0.001$ ,  $\rho_{\text{Spearman}} = -0.89$ ,  $Cl_{95\%} [-1.03, -0.79]$ ,  $n_{\text{pairs}} = 32$   
 $\chi^2_{\text{gof}}(3) = 133.47$ ,  $p = < 0.001$ ,  $V_{\text{Cramer}} = 0.27$ ,  $Cl_{95\%} [0.23, 0.31]$ ,  $n_{\text{obs}} = 592$





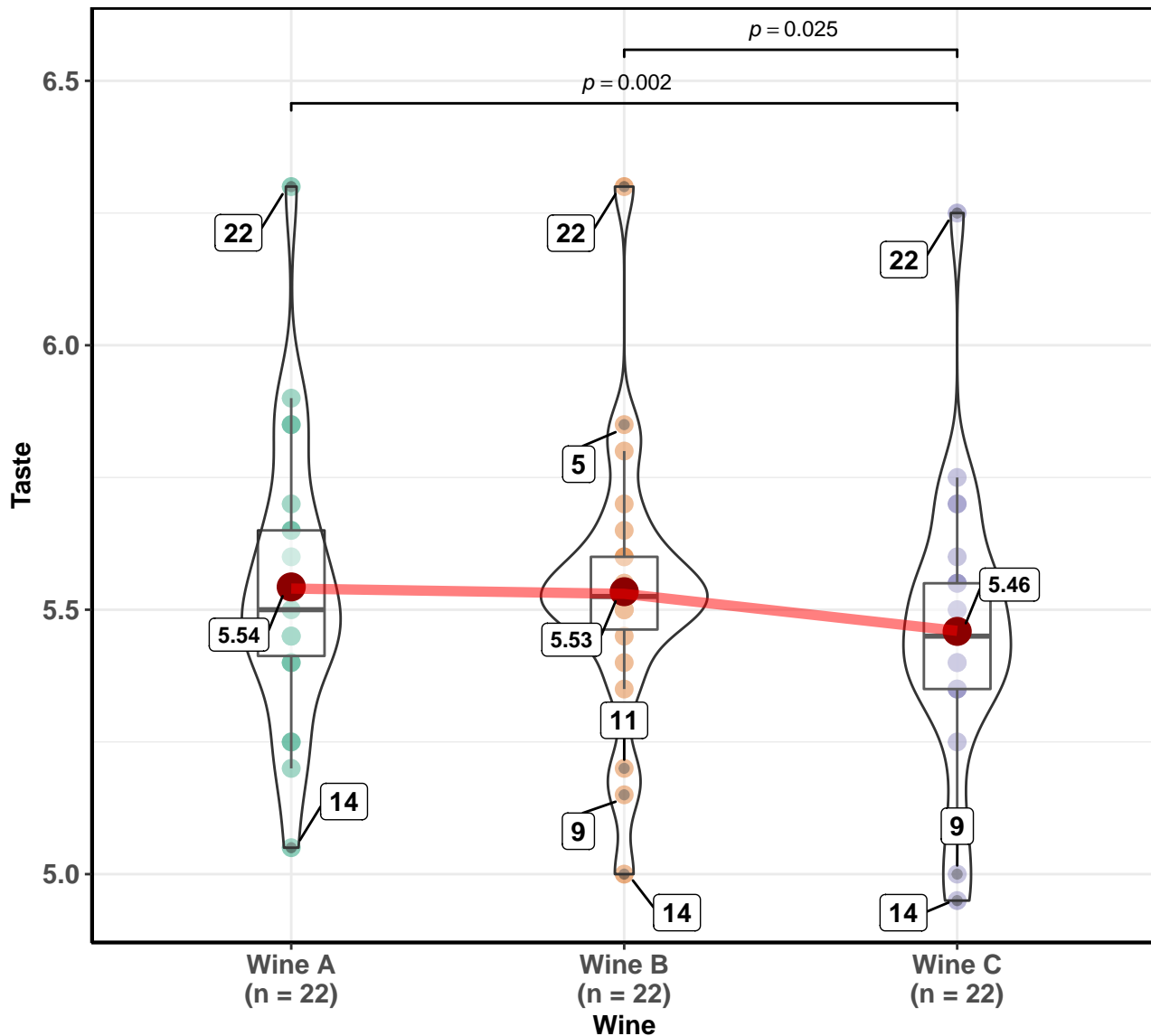
$t(33) = -3.96, p = < 0.001, g = -0.66, CI_{95\%} [-1.07, -0.31], n_{\text{pairs}} = 34$



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



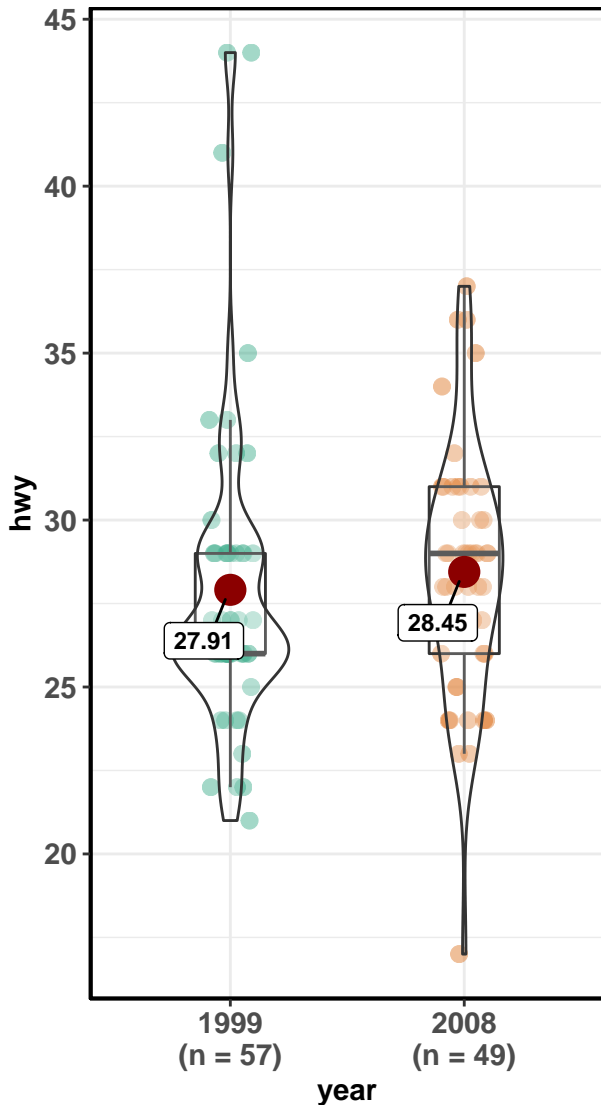
$\chi^2(2) = 11.14$ ,  $p = 0.004$ ,  $W_{\text{Kendall}} = 0.82$ ,  $\text{CI}_{99\%} [0.82, 1.00]$ ,  $n_{\text{pairs}} = 22$



Pairwise comparisons: **Durbin–Conover test**; Adjustment (p–value): **Holm**

drv: f

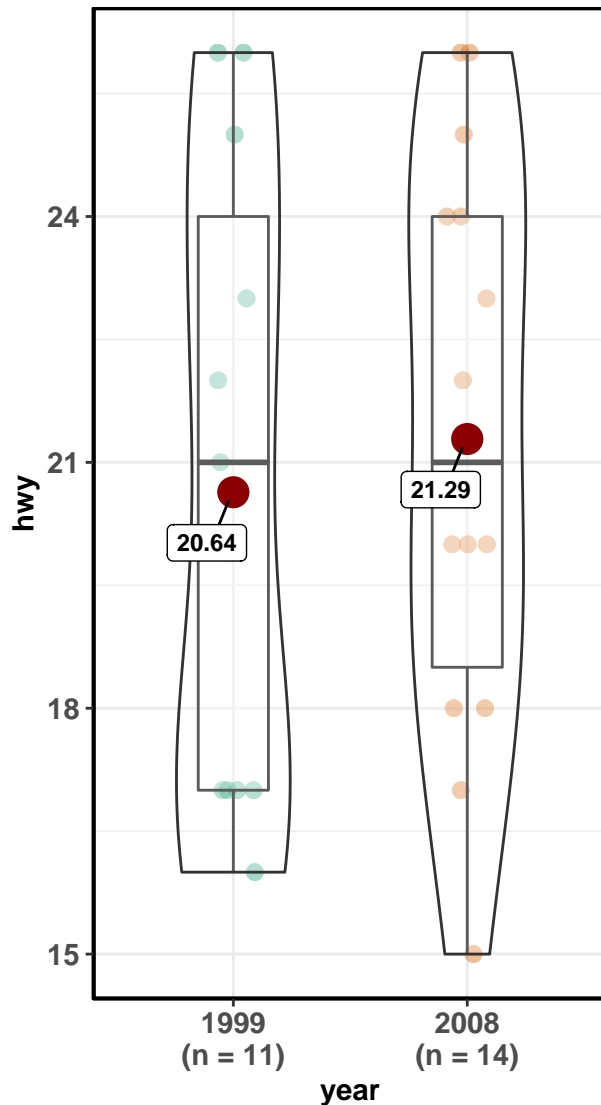
$(-0.63, 0.37) = -0.66, p = 0.509, g = -0.13, CI_{99\%} [-0.63, 0.37]$



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

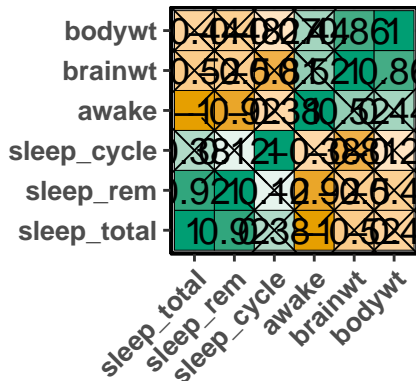
drv: r

$(-1.21, 0.87) = -0.43, p = 0.675, g = -0.17, CI_{99\%} [-1.21, 0.87]$



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

### vore: carni

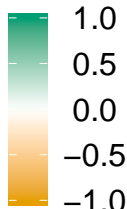


sample size:

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

correlation:

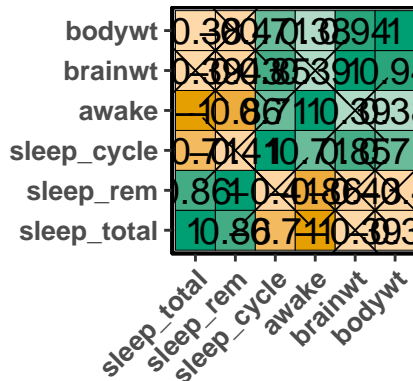
Pearson



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:

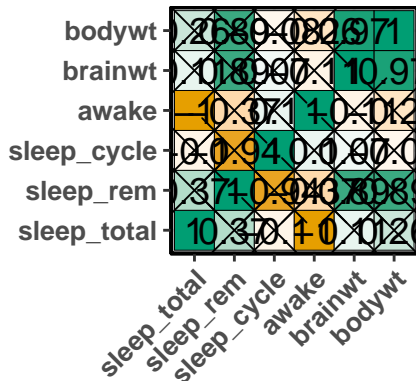
Pearson



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

Adjustment (p-value): None

### vore: insecti

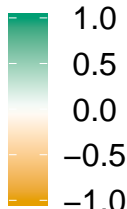


sample size:

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

correlation:

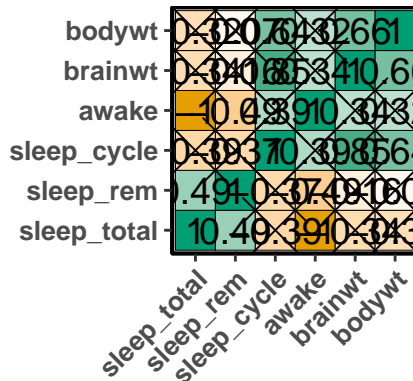
Pearson



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:

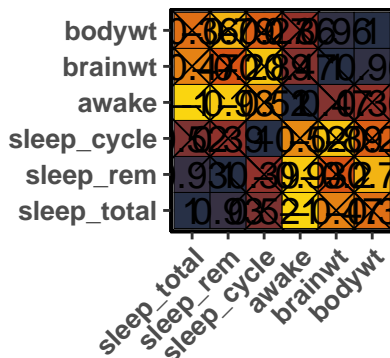
Pearson



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

Adjustment (p-value): None

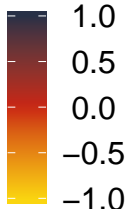
### vore: carni



sample size:

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

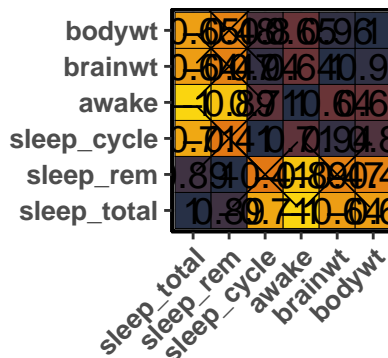
correlation:  
 robust (% bend)



= correlation non-significant at  $p < 0.05$

Adjustment (p-value): Holm

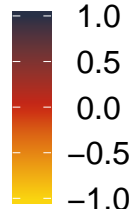
### vore: herbi



sample size:

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

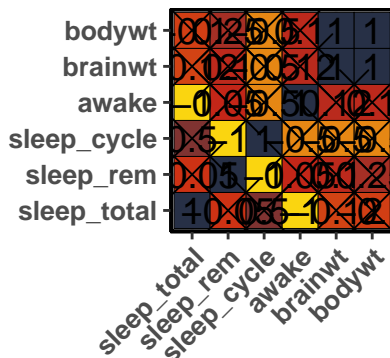
correlation:  
 robust (% bend)



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

Adjustment (p-value): Holm

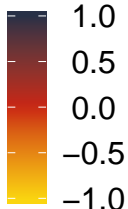
### vore: insecti



sample size:

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

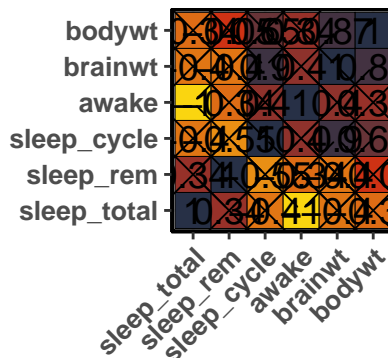
correlation:  
 robust (% bend)



= correlation non-significant at  $p < 0.05$

Adjustment (p-value): Holm

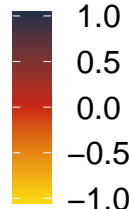
### vore: omni



sample size:

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

correlation:  
 robust (% bend)

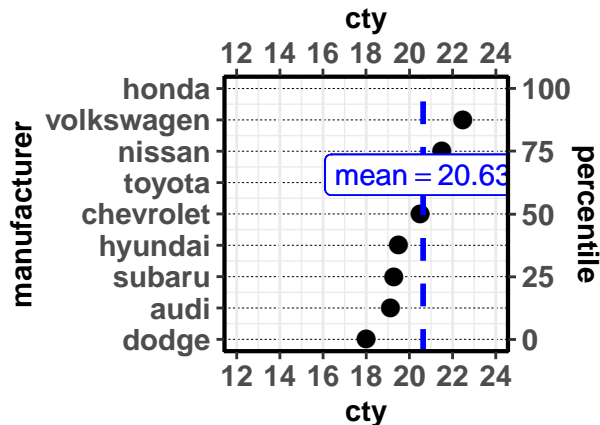


X = correlation non-significant at  $p < 0.05$

Adjustment (p-value): Holm

### cylinder count: 4

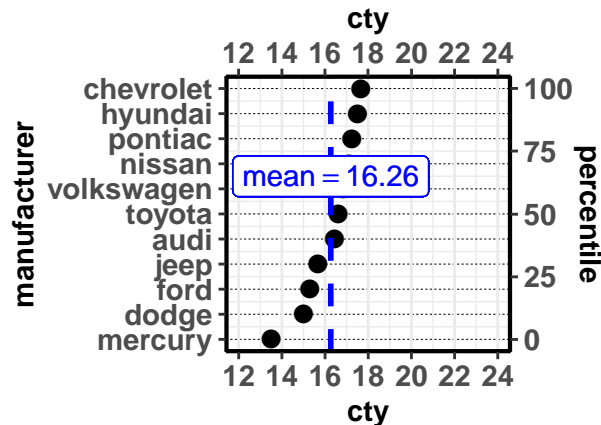
$t(8) = 7.82, p = < 0.001, g = 2.32, CI_{95\%} [1.25, 4.25], r = 0.89$



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

### cylinder count: 6

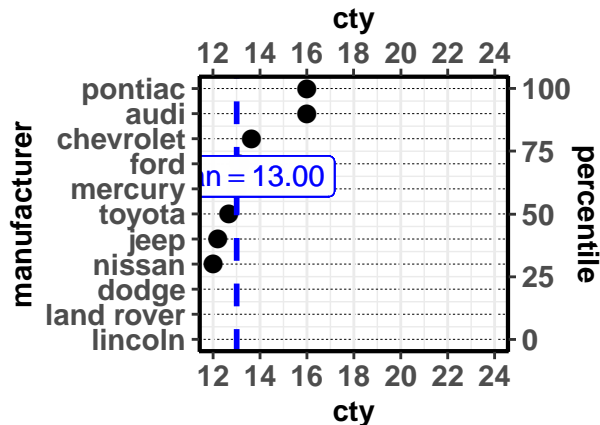
$t(10) = 1.99, p = 0.075, g = 0.55, CI_{95\%} [-0.06, 1.29], n = 11$



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

### cylinder count: 8

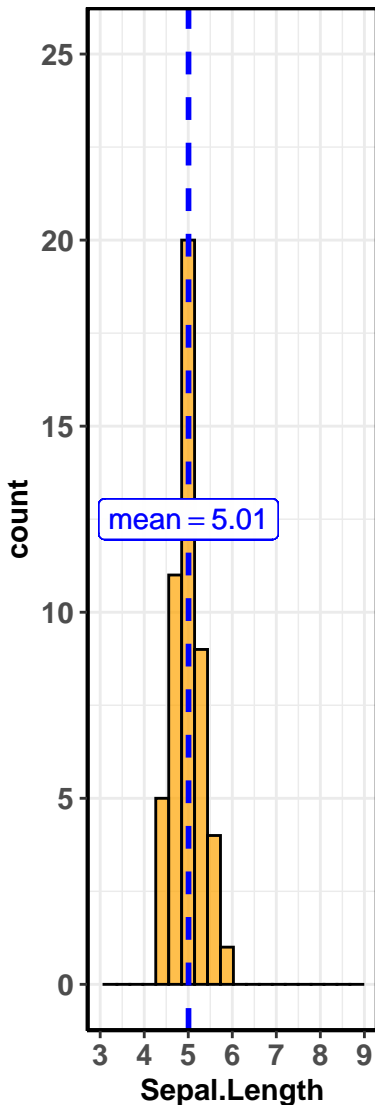
$t(10) = -5.01, p = 0.001, g = -1.38, CI_{95\%} [-2.49, -0.64], n_{obs} = 11$



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

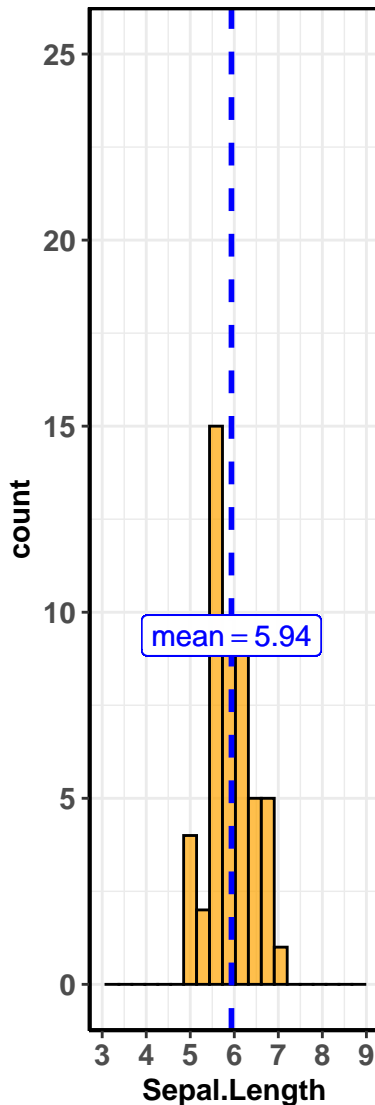
### Species: setosa

$t(49) = 26.82, p = < 0.001, g = 1.78, CI_{95\%} [1.37, 2.19]$



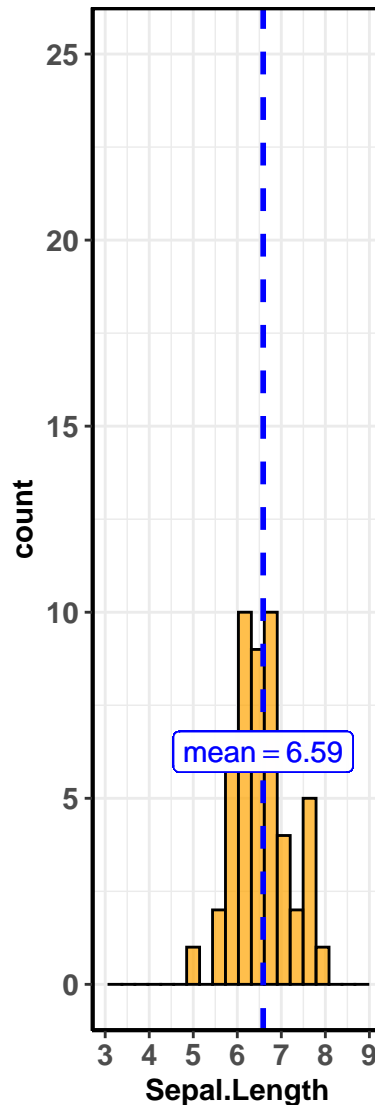
### Species: versicolor

$t(49) = 26.82, p = < 0.001, g = 1.78, CI_{95\%} [1.37, 2.19]$



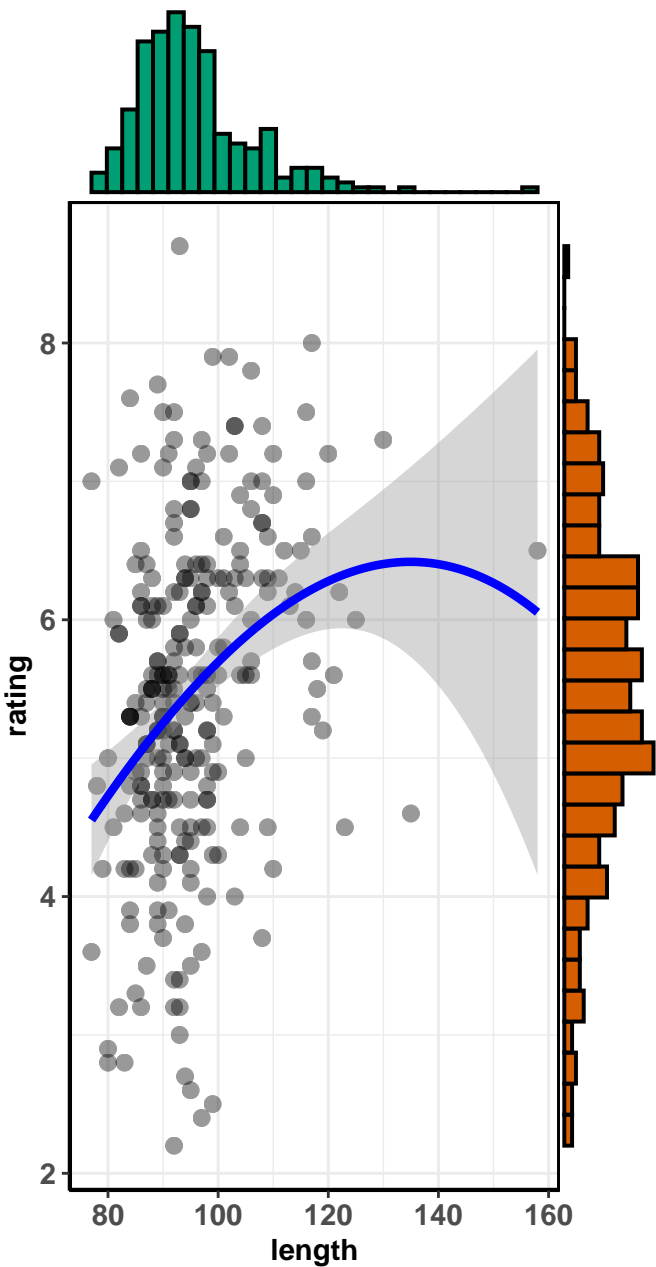
### Species: virginica

$t(49) = 26.82, p = < 0.001, g = 1.78, CI_{95\%} [1.37, 2.19]$

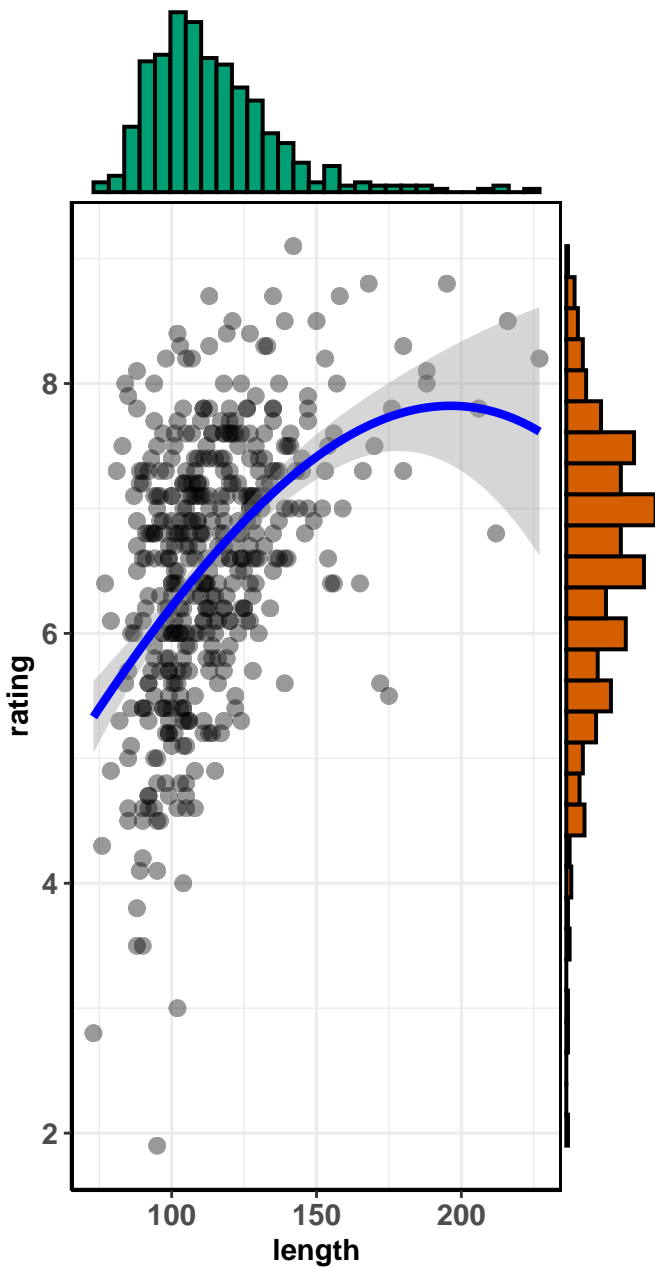


of null:  $\log_e(BF_{01}) = 1.86, r_{Cauchy}^{JZS} = 0.71$  of null:  $\log_e(BF_{01}) = -32.95, r_{Cauchy}^{JZS} = 0.71$  of null:  $\log_e(BF_{01}) = -45.50, r_{Cauchy}^{JZS} = 0.71$

genre: Comedy

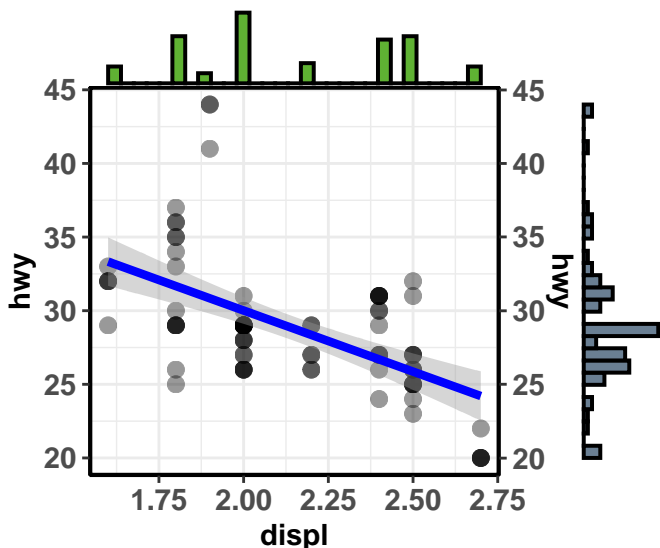


genre: Drama



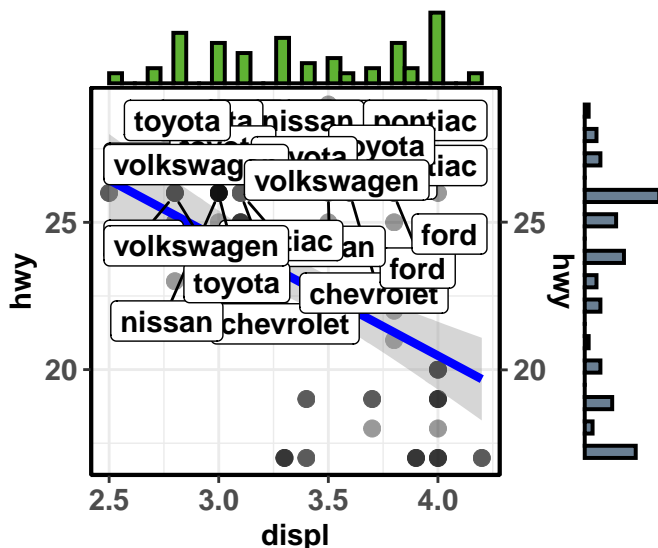
### Cylinder count: 4

< 0.001,  $\rho_{pb} = -0.61$ ,  $CI_{95\%} [-0.76,$



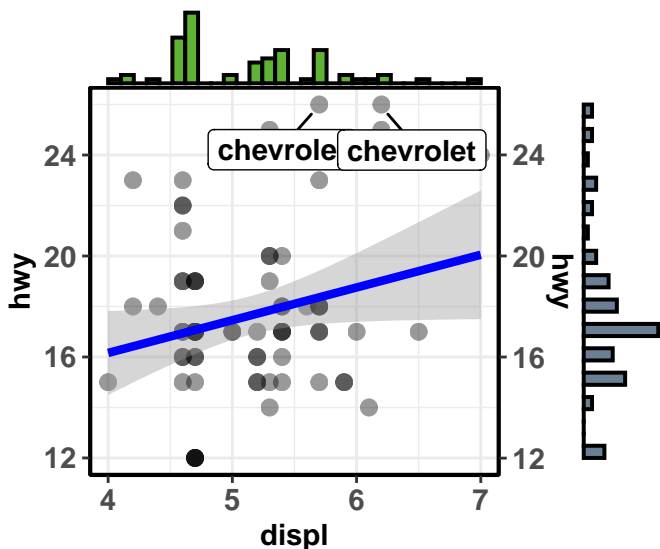
### Cylinder count: 6

< 0.001,  $\rho_{pb} = -0.50$ ,  $CI_{95\%} [-0.63,$



### Cylinder count: 8

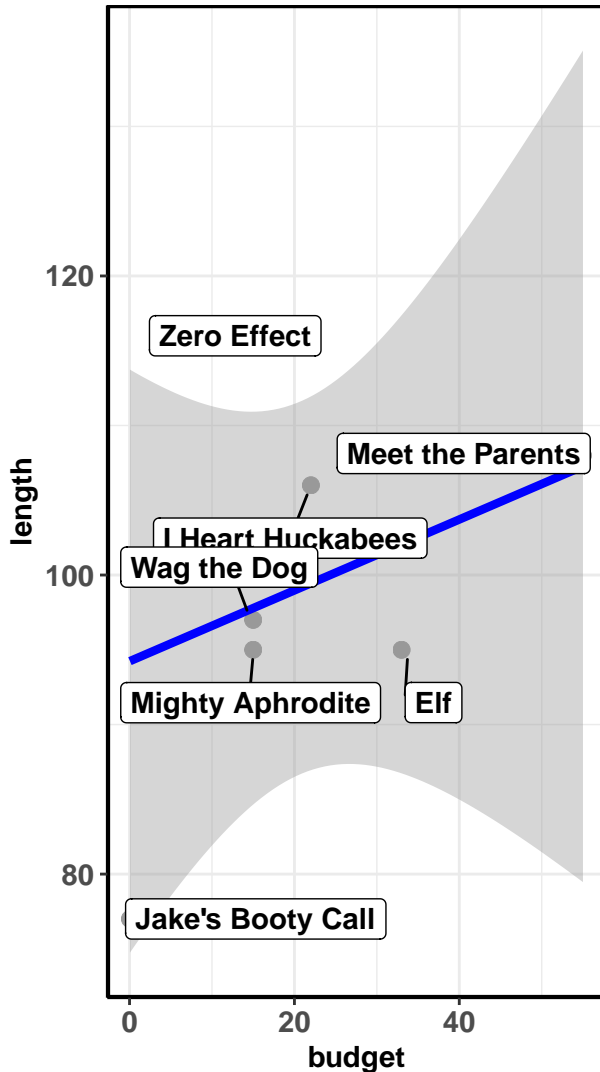
= 0.216,  $\rho_{pb} = 0.15$ ,  $CI_{95\%} [-0.17, 0$



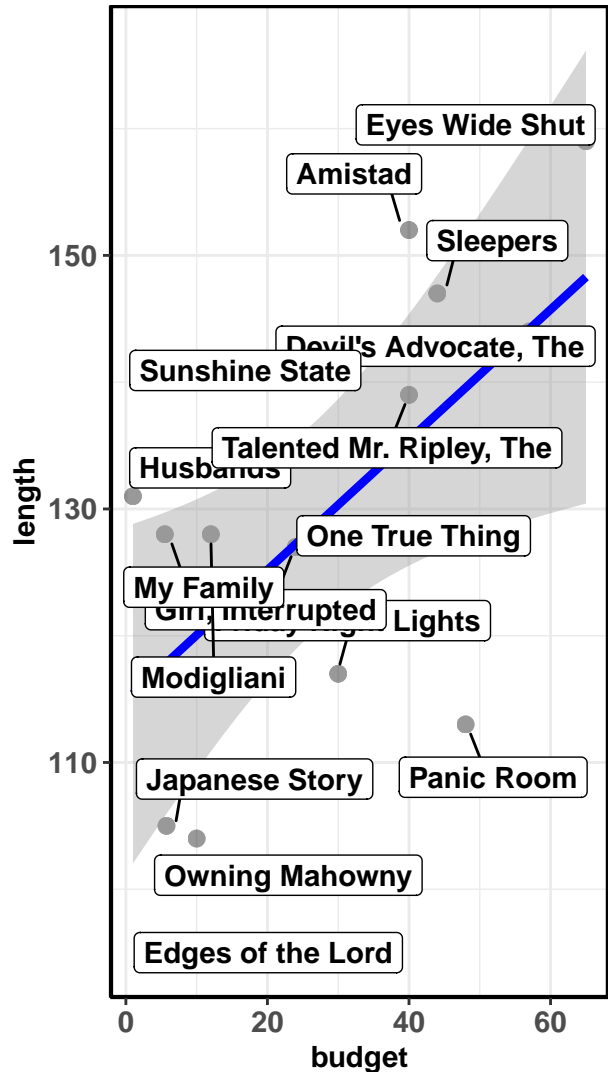


## Genre: Comedy

$r(5) = 0.84, p = 0.439, r_{\text{Pearson}} = 0.35, \text{CI}_{95\%} [-0.55, 0.87]$   
 $t(14) = 2.67, p = 0.018, r_{\text{Pearson}} = 0.58, \text{CI}_{95\%} [0.12, 0.84], r$



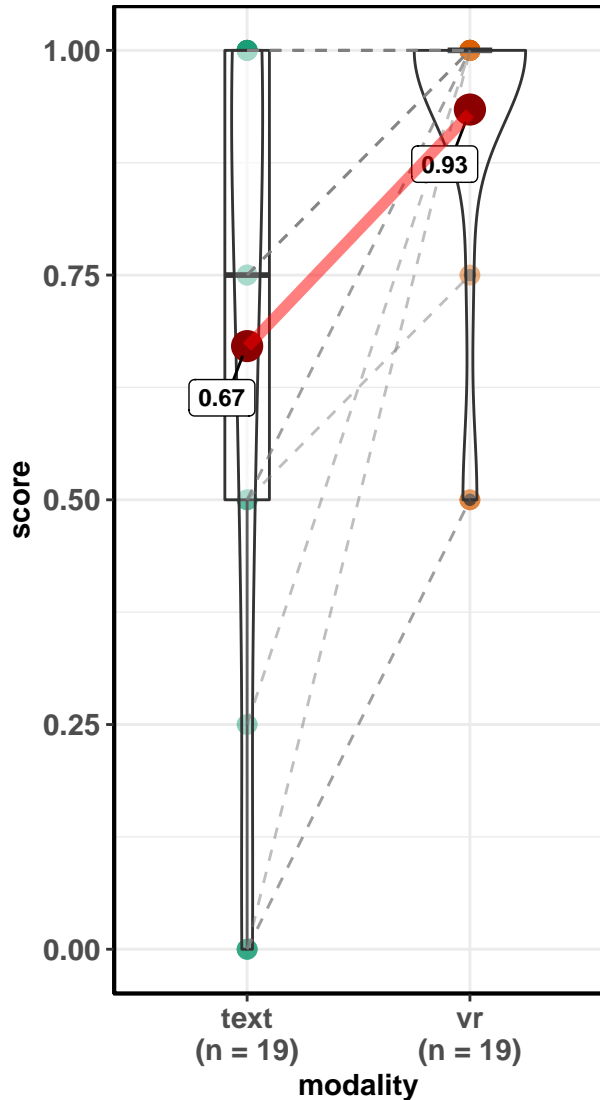
## Genre: Drama



All movies have IMDB rating equal to 7.

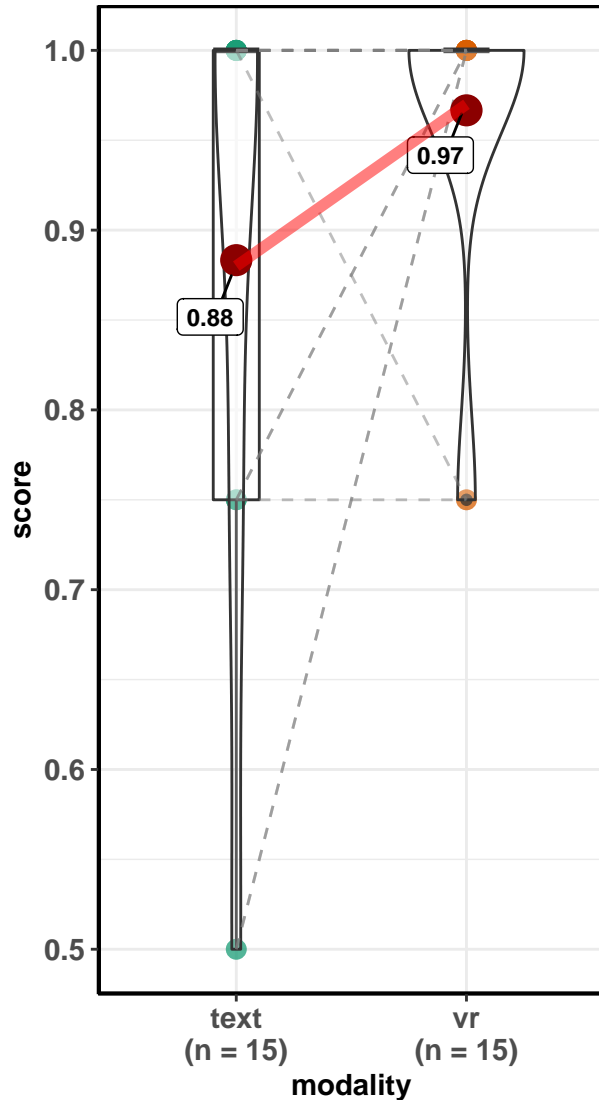
order: 0

(18) = -3.90,  $p = 0.001$ ,  $g = -0.85$ ,  $CI_{95\%} [-1.46, -0.36]$ ,  $t(14) = -1.58$ ,  $p = 0.136$ ,  $g = -0.38$ ,  $CI_{95\%} [-0.96, 0.13]$ ,  $n$



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

order: 1



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

