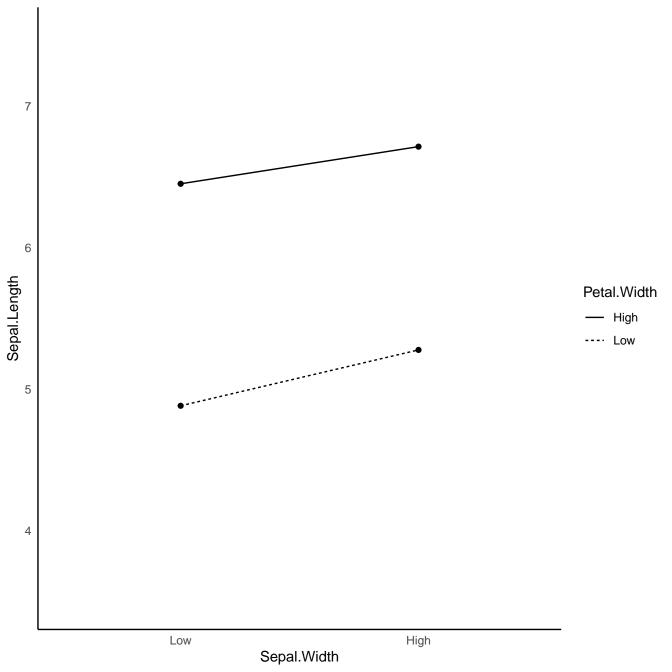
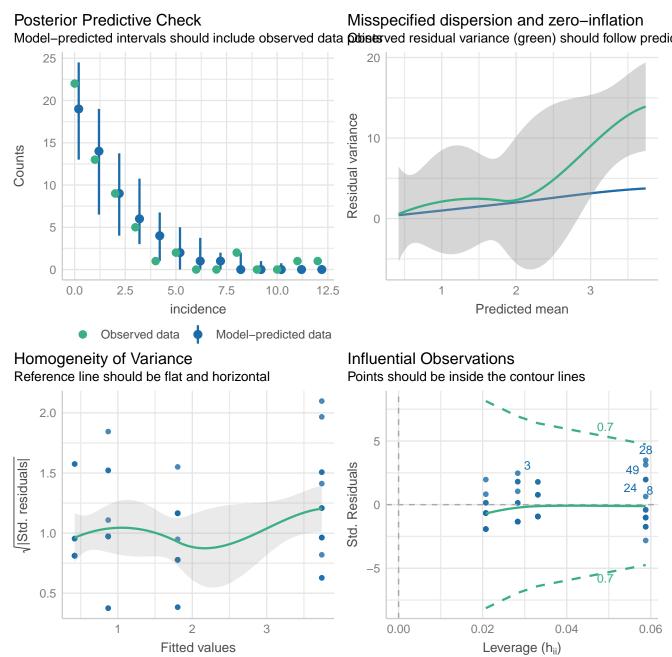
### Posterior Predictive Check Linearity Model-predicted lines should resemble observed data line eference line should be flat and horizontal 0.5 1.0 0.4 0.5 Residuals Density 0.3 0.0 0.2 -0.50.1 -1.00.0 6.5 5.0 5.5 6.0 7.0 4.5 Sepal.Length Fitted values Observed data — Model-predicted data Homogeneity of Variance Influential Observations Reference line should be flat and horizontal Points should be inside the contour lines 20 V|Std. residuals| 1.5 Residuals 10 0.8 1.0 Std. | 0.8 -100.5 -205.5 6.0 6.5 7.0 0.00 0.05 0.10 4.5 5.0 Fitted values Leverage (hii) Collinearity Normality of Residuals High collinearity (VIF) may inflate parameter uncertainty bots should fall along the line of the line Sepal.Width:Petal.Width

3

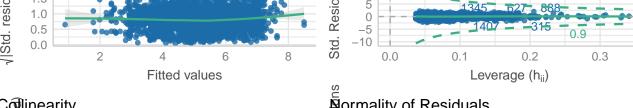
Standard Normal Distribution Quantiles

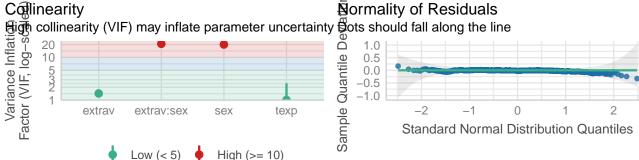


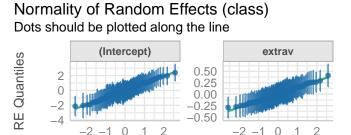




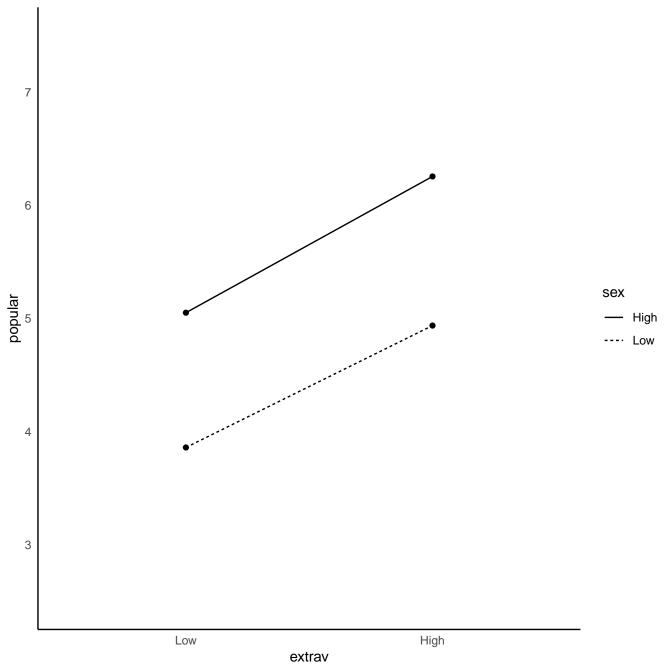
#### Posterior Predictive Check Linearity Model-predicted lines should resemble observed data line ference line should be flat and horizontal 0.3 2 Residuals Density 0.2 0 0.1 0.0 0.0 2.5 5.0 10.0 7.5 8 popular Fitted values Observed data — Model-predicted data Homogeneity of Variance Influential Observations Reference line should be flat and horizontal 1.5 1.0 0.5 0.0 2 4 6 Points should be inside the contour lines Std. Residual 10 0.9 5 627 888 0 -5

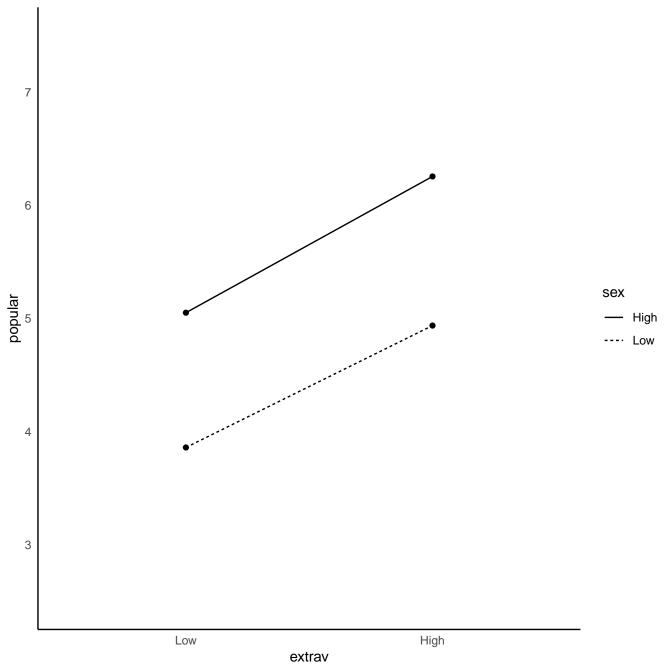






Theoretical Quantiles



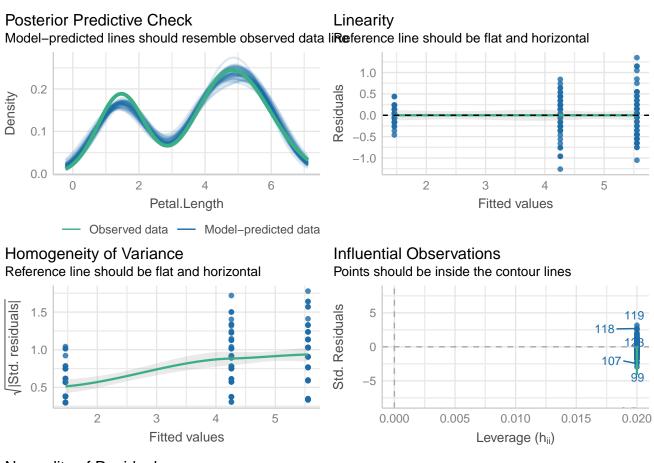


### Posterior Predictive Check Linearity Model-predicted lines should resemble observed data line eference line should be flat and horizontal 0.5 1.0 0.4 0.5 Residuals Density 0.3 0.0 0.2 -0.50.1 -1.00.0 6.5 7 5.0 5.5 6.0 7.0 4.5 Sepal.Length Fitted values Observed data — Model-predicted data Homogeneity of Variance Influential Observations Reference line should be flat and horizontal Points should be inside the contour lines 20 /|Std. residuals| 1.5 Residuals 10 0.8 1.0 Std. | 0.8 -100.5 -205.5 6.0 6.5 7.0 0.00 0.05 0.10 4.5 5.0 Fitted values Leverage (hii) Collinearity Normality of Residuals High collinearity (VIF) may inflate parameter uncertainty bots should fall along the line of the line Sepal.Width:Petal.Width

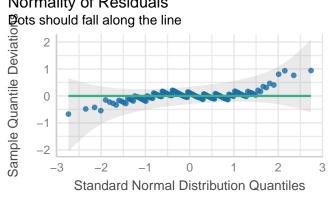
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Standard Normal Distribution Quantiles

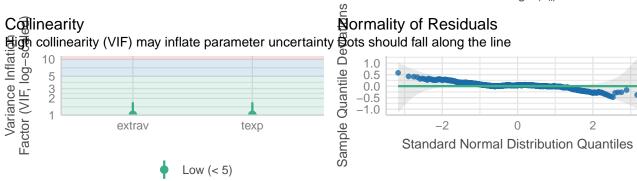
Low (< 5) High (>= 10)

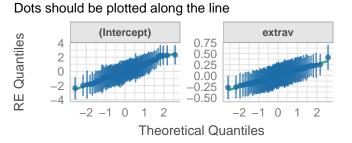


# Normality of Residuals



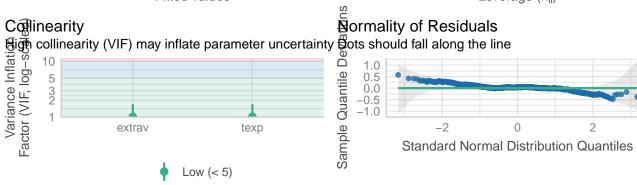
### Posterior Predictive Check Linearity Model-predicted lines should resemble observed data lineeference line should be flat and horizontal 0.3 Residuals Density 0.2 0.1 0.0 8 popular Fitted values Observed data — Model-predicted data Homogeneity of Variance Influential Observations Reference line should be flat and horizontal 1.5 1.0 0.5 0.0 2 4 6 Points should be inside the contour lines Std. Residual 5 0 -5 0.8 8 0.0 0.2 0.3 0.1 Fitted values Leverage (hii) **Collinearity** Normality of Residuals

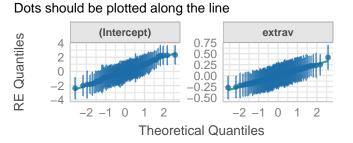




Normality of Random Effects (class)

## Posterior Predictive Check Linearity Model-predicted lines should resemble observed data lineeference line should be flat and horizontal 0.3 Residuals Density 0.2 0.1 0.0 8 popular Fitted values Observed data — Model-predicted data Homogeneity of Variance Influential Observations Reference line should be flat and horizontal 1.5 1.0 0.5 0.0 2 4 6 Points should be inside the contour lines Std. Residual 5 0 -5 0.8 8 0.0 0.2 0.3 0.1 Fitted values Leverage (hii)





Normality of Random Effects (class)