

Behavioral Genetics Graphing2

Name:

Model 1: variables and data

Read This! Remember/review the material on canvas on types of variables/data and example graphs.

Use the data set called “brood_size_age” (there is a link to the google on Canvas).

This data is the result of an experiment with a small soil nematode (a tiny worm) that is used for many different kinds of experiments, in this case one to see if there is a relationship between parental age (in days) and the brood size (how many offspring the individual has). The hypothesis is that as parental age increases, the brood size will decrease. There may also be a difference between the genotypes.

1. What does each row represent in the brood_size_age data set in Model1?

2. For each variable in the data in Model1 , name the type and explain your reasoning:

genotype

brood size

parent age

Application questions

Read This! Remember/review the material on canvas on types of variables/data and example graphs. For all of the sketches below, also make real graphs in your copy of the google sheets that you will submit on Cavas.

3. Sketch an appropriate graph of each of the following (also include the name of the graph type and an explanation of why it is appropriate, make sure that all graphs have clearly labeled axes):

3a. brood size alone

3b. parent age alone

3c. genotype and brood size – sketch both types (but since side-by-side box plots are hard to make in the google, make a stacked histogram. To do this in the google, you need to make 2 separate histograms, then make the X axes all the same as well as set the bin width (called “bucket size” in the google) to be the same for both graphs.)

3d. parent age and brood size