Group 4 Chickadees Project Outline

Title slide:

Background info:

Helpful background info for audience.

Black capped chickadees are small, non-migratory birds found in the northern United States and Canada. They live in both rural and urban environments, and eat mostly insects and seeds. These birds have a high level of neuro-flexibility, for example:

Every autumn Black-capped Chickadees allow brain neurons containing old information to die, replacing them with new neurons so they can adapt to changes in their social flocks and environment even with their tiny brains. (<https://www.allaboutbirds.org/guide/Black-capped_Chickadee/overview#>)

Need context for the study and why it was done.

How innovative are chickadees at solving problems? What are the traits of birds who are the best at solving problems? Animal innovation, which would be the use of novel behaviors to meet challenges, play a role in the evolution of animals. The study birds were presented with a simple puzzle for a food reward.

Sample image of lever and paper shredding tests:

A picture containing floor

Description automatically generated

What was the goal of the study?

This study compares the problem-solving innovation rate by the effect of dominance rank, exploratory personality, and the urbanization of the capture sites, which were located in and around Ottowa, Canada.

Goals of Study:

What was the overall time to solving the problems (lever pulling, paper ripping, and persistence & repeatability) for chickadees? What covariates/characteristics were most closely predictive of whether a chickadee figured out the problems?

Data and Methodology:

Results/Analysis:

Conclusions: