Problem Summary:

The honors undergraduate who did this research and I are hoping for help with analysis, though the analysis may be too basic for these students. Here's an abstract for the project: Recreational activity in natural areas can disrupt songbird singing during critical periods of learning or courtship, increasing the risk of fitness and population declines in sensitive species. Local data on birdsong disturbance caused by recreational activities can guide management efforts to protect wildlife, such as signage, leash laws, and dog walking bans.

This study assessed how birds respond to user groups with and without dogs in urban greenspaces. Surveys were conducted in Fall 2024 at three urban parks in Portland, Oregon, with varying rates of dog and human presence. Throughout two-hour observation periods, birdsong activity of seven local and migratory songbirds was recorded at five-minute intervals and when recreational user groups crossed a 29 m trail segment. All species sang more in the absence of user groups, and ceased singing more when groups were present–especially if they had dogs. Song sparrows sang the most of all species and showed site-specific responses to dogs; however, dogs had the greatest impact on other birds. Species other than Song sparrows were least likely to sing when groups had dogs, and song sparrows followed this trend at a dog-permitted site with minimal dog activity. In contrast, Song sparrows were more likely to sing when groups had dogs at the site with the highest dog activity, suggesting habituation to frequent dog activity.

These findings show that dog presence disturbs some bird species more than others. Reduced birdsong and increased singing cessation associated with dog walking indicate a continued need for leash-only or dog-restricted urban parks.

Specific hypotheses / questions to be addressed:

People walking with dogs in urban greenspaces will disrupt birdsong more than people walking without dogs, who will in turn disrupt more than when nobody is walking by.