Comparing the effects of strict cognitive stimulations versus physical exercise on nuisance behavior in domestic dogs

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Introduction

- When a dog, or any animal is not properly stimulated problem behaviors can arise such as;
 - inappropriate elimination, chewing furniture or toys, whining, obsessive compulsive disorder and many others.
- When dogs were first domesticated, they were bred for a variety of specific purposes such as hunting, fighting, pointing, racing, or just to be lap dogs. Today we group domestic dogs into groups based on the historical use of the breed, and this still has an effect on the behavior of dogs based on their breeds (Beaver 2009).
- There is a neuroanatomical variation across various sections of the canine brain based on breed. This affects their cognitive abilities to perceive information and how much cognitive exercise they might need to fulfill their needs.
- Due to this and the lack of general understanding of these specific stimulatory needs of dogs, problem behaviors can arise.
 - Some problem behaviors can be treated through medicine, but other more homeopathic treatments are being explored in depth now.
 - This includes prescribed physical exercise to treat problem behaviors such as obsessive-compulsive behaviors and other nuisance behaviors (Askew 2003).
- Management of the animal's environment is being used to treat these problem behaviors by giving them more opportunities to express their natural behaviors.
 - This could be an increase in physical exercise, increased training sessions, cognitive stimulatory toys or more (Hedges 2021)
- This paper focuses on cognitive exercise compared to physical exercise in treating and preventing nuisance behaviors.
 - There are many aspects to the individual dog that must be taken into account, such as breed, temperament, dog-owner relationship, age, sex, life experience and more.
- This study aims to gather a variety of different breeds, ages, and sexes of dogs from a variety of different households to determine whether cognitive exercise or physical exercise has a greater effect on diminishing nuisance behaviors in domestic dogs across the country.

Sample Survey



Exclusion Criteria

Inclusion and

Full paper

Scan for references

Research Question/Hypothesis

Research question:

What has a greater positive effect on a domestic dog's nuisance behaviors, one hour of cognitive exercise or one hour of physical exercise?

Hypothesis:

I hypothesize that although cognitive stimulation will have a positive effect on a dog's nuisance behaviors that this effect will not be as significant as the effect from physical exercise.

Materials and Methods

Gathering Sample Population

Survey will be distributed through social media; veterinary offices; humane societies and shelters; newspapers; radio announcements; soliciting volunteers in public; and if possible, news outlets. This survey will be distributed throughout the 50 states to ensure that it reaches all geographical locations within the United States, economic and cultural differences.

Criteria Used to Choose Participants

Participants will be chosen to encompass a variety of civilian demographics throughout the United States. These participants will also be chosen based on age, sex, and breed of dog to ensure a variety of animals in this study.

Participant Instructions (Mental Stimulation Group)

Of the fifteen participants chosen from each classification listed by the Bureau of the Census, five participants will receive instructions to spend one hour every day for thirty days with their pet doing mental stimulating activities. The activities described in this category are puzzles, and obedience and/or trick training. Each day the participants will be required to log the time spent with their pet, and any instance of nuisance, obsessive compulsive or other unwanted behaviors throughout this time period. All other aspects of the animal's daily routine will remain the same.

Participant Instructions (Physical Exercise Group)

Of the fifteen participants chosen from each classification listed by the Bureau of the Census, five participants will receive instructions to spend one hour every day for thirty days with their pet doing physical exercise. The activities instructed to be used will be running, hiking, and swimming. Each day the participants will be required to log the time spend with their pet, and any instance of nuisance, obsessive compulsive or other unwanted behaviors throughout this time period. All other aspects of the animal's daily routine will remain the same.

Participant Instruction (Control Group)

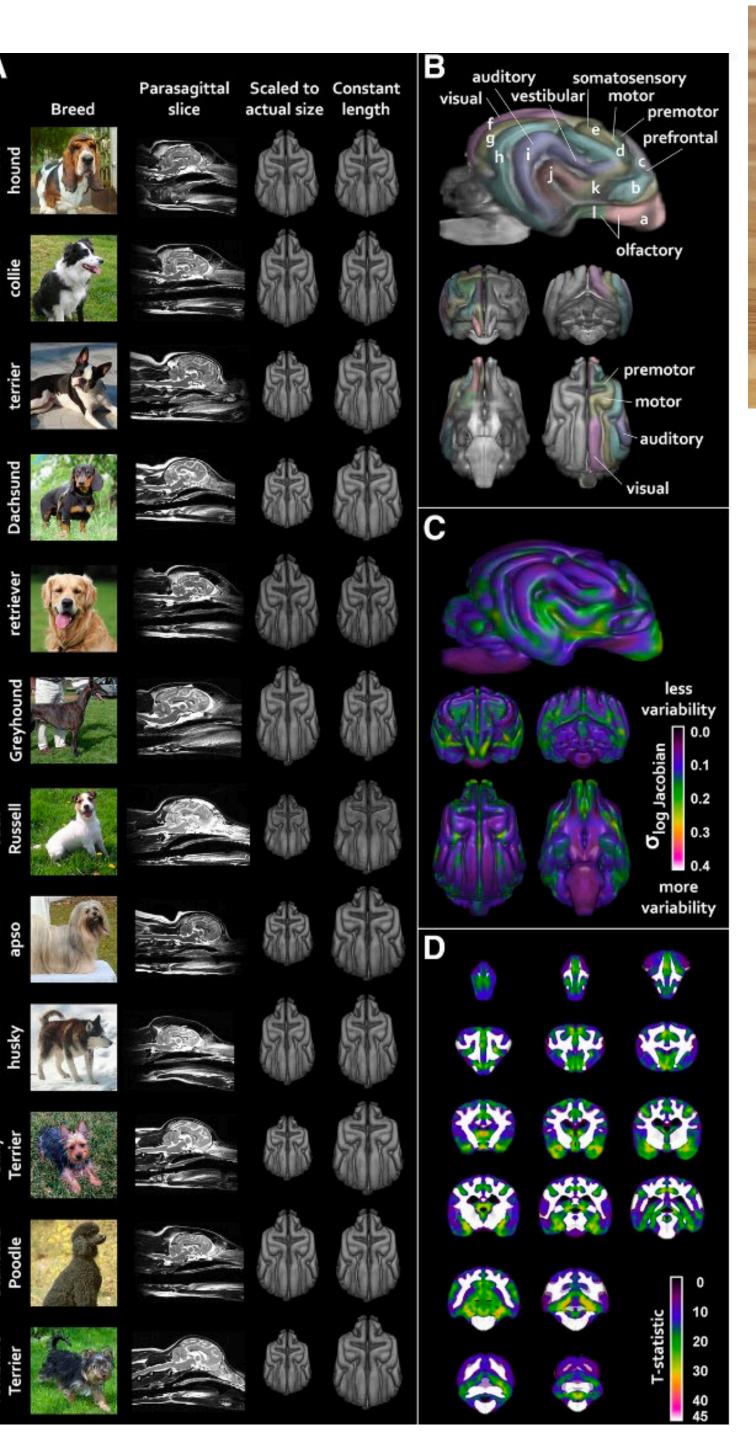
Of the fifteen participants chosen from each classification listed by the Bureau of the Census, five participants will receive instructions not to change any aspect of their daily routine with their pet. However, these participants will still be asked to log any instance of nuisance, obsessive compulsive or other unwanted behaviors throughout the 30-day time period.

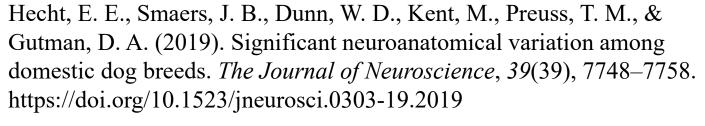
Compilation of Data

Once the thirty-day period of this experiment have ended, data received from the participants will be observed and studied.

Discussion

- This study aims to learn whether there is validity in the statement that one hour of mental stimulation will have the same positive effect on dog behavior as one hour of physical exercise.
- This study has a large scope in order to take into account the multiple different breeds, ages, sexes, and household dynamics across the United States.
- Since we are using citizens to assist us in gaining our data, a certain amount of discrepancy will need to be accounted for.
- This study aims to also cover economical differences in households, as the ability of individuals to gain knowledge about animal behavior, best practices, and even just the outlook on having a dog in the house will differ among the various economical levels present in the United States.
- Although this study is large and will take a large amount of time to implement and complete due to the large scale of the project, conducting the study in this way will ensure that the best statistics will be gathered that covers the largest number of variables across the United States.







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