



Using Structured Interactions to Increase Adoption of Shelter Dogs

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INTRODUCTION

Animal shelters in the United States admit approximately 5 to 7 million animals each year with 60% of dogs and 70% of cats being euthanized¹. As a consequence of financial limitations and overpopulation, the animals live in barren, noisy shelter environments with limited opportunity for additional engaging in species-specific behaviors and enrichment activities that would contribute to positive behavior modifications.² Although sterilization and euthanasia can address non-adoptable pets, it is also essential to increase the output rate of pets from shelters by improving adoption rates.

Protopopova & Wynne³ found that the probability of adoption was higher in concrete play yards with dogs accepting play initiation and laying in proximity to the adopter. Thus, the objective of this behavioral study was to assess if increasing appropriate interactions, such as play and laying in proximity between an adopter and shelter dog, would result in higher adoption rates.

HYPOTHESIS

We hypothesized that using the play style that is preferred by the dog and increasing proximity of the dog to the adopter during an interaction with potential adopters would (1) increase the rate of play during the interaction and (2) increase the likelihood that the dog is adopted.

MATERIALS AND METHODS

Phase 1

- 20 dogs were given a brief preference assessment to determine the dog's preferred play type.
- The brief preference assessment presents the dogs with four toys (ball, rope, squeaky, and plush) in random order for three trials each. For a successful trial, the dog had to mouth the toy for at least two seconds and return it to the experimenter for a treat.
- Following the brief assessment, the dogs were given a validity test every two days for two weeks.

Phase 2

- The structured interactions between shelter dogs and adopters were observed (n=68).
- Adoption or non-adoption outcome was obtained after the interaction.
- When assigned to the experimental condition, dogs were given a brief preference assessment and asked to go in the down position for ten trials.
- In the structured interactions, the experimental dogs were brought into the concrete play yard and played with the adopter using their preferred toy and asked to lay in proximity to the adopter. Control dogs interacted with adopter in the grass yard with no guided structure.

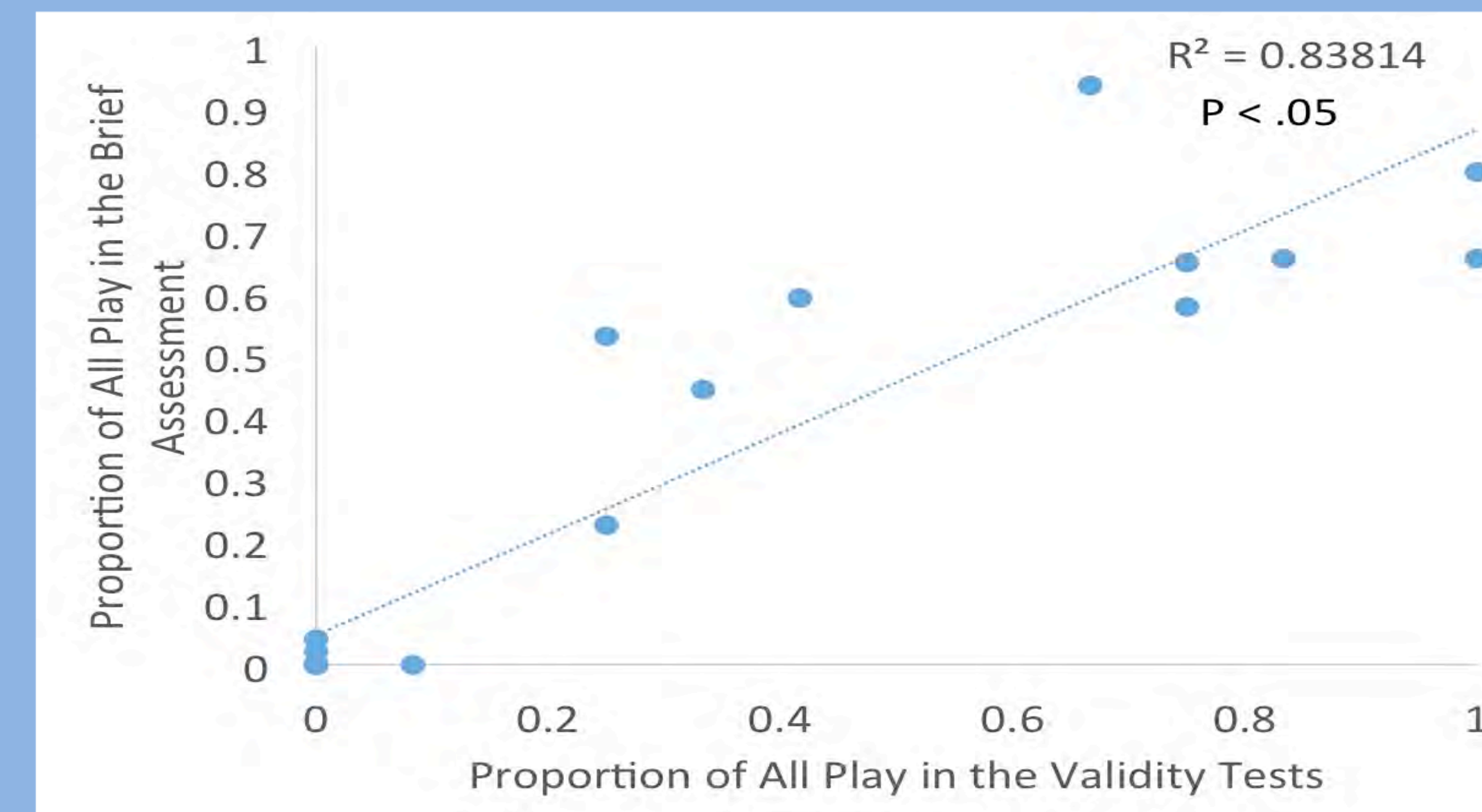


Figure 1. Pearson product-moment correlation of all play from brief assessments and validity tests in Phase 1.

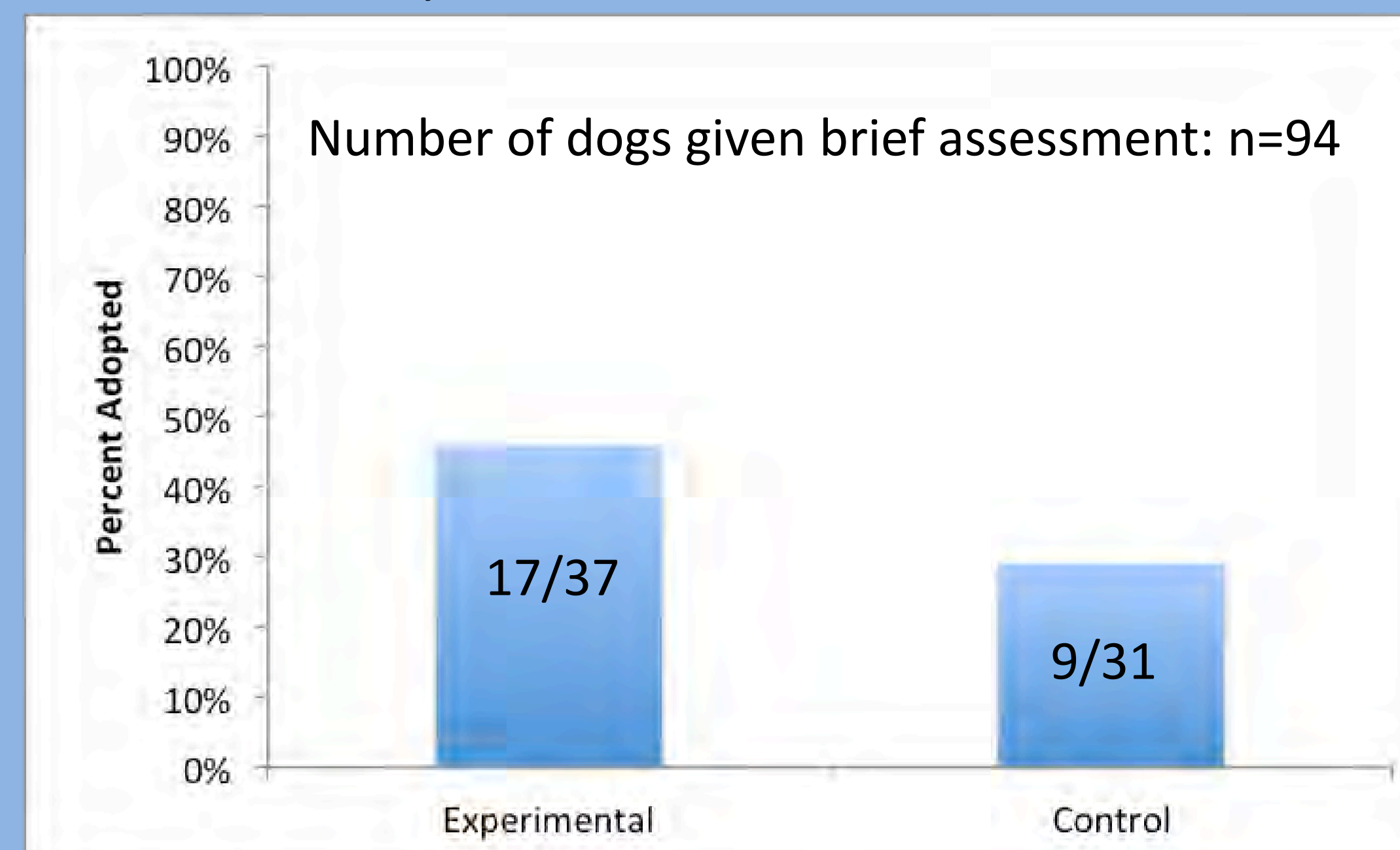


Figure 2. Percentage of dogs adopted in the experimental and control conditions in Phase 2.



Figure 3. Structured interactions between shelter dogs and adopters were video recorded in Phase 2.

PRELIMINARY RESULTS

Phase 1

- 20 dogs completed at least one test, 16 completed at least two, 11 completed at least three, nine completed at least four, five completed at least five, and three completed six tests.
- On average, in the validity tests, the tennis ball was played 21.1% of the time (SD = 36.0%), the plush toy was played with 29.1% of the time (SD = 40.2%), the rope was played with 27.0% of the time (SD = 36.4%), and the squeaky toy was played with 21.3% of the time (SD = 32.4%).
- 13 dogs engaged in play for some portion of the time, whereas seven dogs never played in either the brief assessment or the validity test
- The Pearson product-moment correlation between play in the brief assessment and the validity tests was $R^2 = .84$ ($P < .05$).

Phase 2

- Number of dogs given the brief assessment: n=94.
- 37 experimental interactions have been recorded with 17 experimental dogs adopted.
- 31 control interactions have been recorded with 9 control dogs adopted.
- 42% of experimental dogs given the brief assessment played with a preferred item rather than treats.
- Although experimental dogs were adopted at a slightly higher rate than control dogs, the difference was not significant ($\chi^2 = 2.04$, $df = 1$, $p = 0.153$).

PRELIMINARY CONCLUSION

Phase 1

- The brief preference assessment is an effective method for determining if a dog will play with that object with a potential adopter.

Phase 2

- Our preliminary data suggests that while adoption rates were higher in the experimental condition than the control condition, this difference did not reach statistical significance. We will continue to collect data for a final sample size of 120 interactions.
- The video recordings from phase 2 are currently being coded and the amount of play and play rejection will be calculated.

REFERENCES

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