Structuring Adopter-Dog Interactions to Increase Adoption Rates in Dogs

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A different point of view

- Animal welfare perspective

- Consumer choice perspective

DOG CENTERED APPROACH

HUMAN CENTERED APPROACH
Human centered approach

- Kinds of questions:
  - What do people want in dogs?
  - How can we “sell” our product?
  - Shelter versus pet store
  - Ensuring a quality product
  - Return rates
Choice while at the shelter

In-kennel selection

Out-of-kennel selection
Study 1: Naturalistic observation

- Alachua County Animal Services, FL
- 250 interactions
What predicts adoption?

- Morphology? **NO**
  - Presumably, people already made their decision based on morphology during in-kennel selection

- Location of interaction? **YES**
  - Smaller yard resulted in 1.6 times higher adoption

- Behavior? **YES**

Study 2: Experimental Assessment

- Target behaviors
  - Lie down next to potential adopter
  - Don’t ignore play initiation by the adopter

SOLUTION:

Ask the dog what kind of play it prefers
(individual preference assessment of play)

Encourage the potential adopter to engage with the dog in preferred play style

Measure likelihood of adoption
Validating toy preference assessment

• N = 20
• Present toys consecutively in a random order
• If dog engages in oral contact with toy, the experimenter offers a treat to get the toy back
• The number of contacts for each toy is counted (proportion)

Tennis ball  Fleece rope  Squeaky vinyl toy  Plush toy
Proportion of trials played

R² = 0.8381

Toy preference in assessment predicted play with that toy in naturalistic settings

Proportion of all play in the assessment predicted play in naturalistic settings

Time-efficient toy assessment
Experimental Assessment

- 281 dogs enrolled
  - Random assignment:
    - Experimental
      - Previously validated toy preference assessment
    - Control

- 160 adopter-dog interactions
Dogs in the experimental condition
Dogs in the control condition
Dogs in the experimental condition behaved “better”

More dogs adopted in experimental condition

$\chi^2 = 4.22, p = 0.03$

## Questionnaire

Was the interaction intrusive?

<table>
<thead>
<tr>
<th>I felt comfortable interacting with the dog:</th>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>No opinion</th>
<th>Agree</th>
<th>Strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>I felt I was restricted in being able to interact with the dog:</td>
<td>Strongly disagree</td>
<td>Disagree</td>
<td>No opinion</td>
<td>Agree</td>
<td>Strongly agree</td>
</tr>
<tr>
<td>The adoption volunteer was intrusive/annoying:</td>
<td>Strongly disagree</td>
<td>Disagree</td>
<td>No opinion</td>
<td>Agree</td>
<td>Strongly agree</td>
</tr>
<tr>
<td>I felt comfortable with the adoption volunteer:</td>
<td>Strongly disagree</td>
<td>Disagree</td>
<td>No opinion</td>
<td>Agree</td>
<td>Strongly agree</td>
</tr>
<tr>
<td>I didn’t get a full understanding of the dog’s behavior:</td>
<td>Strongly disagree</td>
<td>Disagree</td>
<td>No opinion</td>
<td>Agree</td>
<td>Strongly agree</td>
</tr>
<tr>
<td>I felt that I was able to evaluate the dog on my own terms:</td>
<td>Strongly disagree</td>
<td>Disagree</td>
<td>No opinion</td>
<td>Agree</td>
<td>Strongly agree</td>
</tr>
</tbody>
</table>

Feel free to leave any comments about your interaction below:

Thank you for your help! Please fold this paper and put it in the envelope provided by the adoption volunteer.
**Time-effective, non-invasive**

**Duration of Interaction**
- Control: 8.3 min
- Experimental: 7.5 min

<table>
<thead>
<tr>
<th>S. No.</th>
<th>Question</th>
<th>Control</th>
<th>Experimental</th>
<th>Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>I was comfortable interacting with dog</td>
<td>4.5</td>
<td>5</td>
<td>0.5</td>
</tr>
<tr>
<td>2</td>
<td>I was restricted in interacting with dog</td>
<td>3</td>
<td>2</td>
<td>-1</td>
</tr>
<tr>
<td>3</td>
<td>Volunteer was intrusive</td>
<td>2.5</td>
<td>2</td>
<td>-0.5</td>
</tr>
<tr>
<td>4</td>
<td>I was comfortable with volunteer</td>
<td>4.5</td>
<td>5</td>
<td>0.5</td>
</tr>
<tr>
<td>5</td>
<td>I didn't get a full understanding of the dog</td>
<td>2</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>6</td>
<td>I was able to evaluate the dog on my own terms</td>
<td>3</td>
<td>3</td>
<td>0</td>
</tr>
</tbody>
</table>

**Notes:**
- Strongly agree: 5
- Strongly disagree: 0

**Graph:**
- X-axis: qualitative responses
- Y-axis: Likert scale
- Control vs. Experimental groups
Study 3: Feasibility and Generality

n = 9 shelter sites
## Multiple-baseline across shelters design

<table>
<thead>
<tr>
<th>Shelter</th>
<th>Months</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>8</td>
</tr>
<tr>
<td>Maricopa (AZ)</td>
<td>BL</td>
<td>BL</td>
<td>EXP</td>
<td>EXP</td>
<td>EXP</td>
<td>EXP</td>
<td>EXP</td>
<td>EXP</td>
</tr>
<tr>
<td>SF SPCA (CA)</td>
<td>BL</td>
<td>BL</td>
<td>EXP</td>
<td>EXP</td>
<td>EXP</td>
<td>EXP</td>
<td>EXP</td>
<td>EXP</td>
</tr>
<tr>
<td>MSPCA (MA)</td>
<td>BL</td>
<td>BL</td>
<td>BL</td>
<td>EXP</td>
<td>EXP</td>
<td>EXP</td>
<td>EXP</td>
<td>EXP</td>
</tr>
<tr>
<td>AZ Humane (AZ)</td>
<td>BL</td>
<td>BL</td>
<td>BL</td>
<td>EXP</td>
<td>EXP</td>
<td>EXP</td>
<td>EXP</td>
<td>EXP</td>
</tr>
<tr>
<td>APA! (TX)</td>
<td>BL</td>
<td>BL</td>
<td>BL</td>
<td>EXP</td>
<td>EXP</td>
<td>EXP</td>
<td>EXP</td>
<td>EXP</td>
</tr>
<tr>
<td>AAC (TX)</td>
<td>BL</td>
<td>BL</td>
<td>BL</td>
<td>BL</td>
<td>EXP</td>
<td>EXP</td>
<td>EXP</td>
<td>EXP</td>
</tr>
<tr>
<td>Riverside (CA)</td>
<td>BL</td>
<td>BL</td>
<td>BL</td>
<td>BL</td>
<td>BL</td>
<td>EXP</td>
<td>EXP</td>
<td>EXP</td>
</tr>
<tr>
<td>SF ACC (CA)</td>
<td>BL</td>
<td>BL</td>
<td>BL</td>
<td>BL</td>
<td>BL</td>
<td>EXP</td>
<td>EXP</td>
<td>EXP</td>
</tr>
<tr>
<td>Abilene (TX)</td>
<td>BL</td>
<td>BL</td>
<td>BL</td>
<td>BL</td>
<td>BL</td>
<td>EXP</td>
<td>EXP</td>
<td>EXP</td>
</tr>
</tbody>
</table>
Data collection

SF SCPA, San Francisco, CA

Austin Pets Alive!, Texas

Abilene Animal Services, Texas
## Baseline differences

<table>
<thead>
<tr>
<th>Further from intervention methods</th>
<th>Closer to intervention methods</th>
</tr>
</thead>
<tbody>
<tr>
<td>Off-leash, large, alone</td>
<td>Off-leash, large, w/ staff</td>
</tr>
<tr>
<td>MSPCA (MA)</td>
<td>AZ Humane (AZ)</td>
</tr>
<tr>
<td>Austin Animal Center (TX)*</td>
<td>Maricopa County (AZ)</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Private County/city** (*adopters are asked to operate the button themselves*)
Already some promising data!

Proportion of meet-and-greets that ended in an adoption

Rating of procedures from furthest to closest to intervention

r = .68
New “equalizing” metric?

No difference!

Proportion ending in adoption

County/City  Private

Shelter Type
Measures

• **Feasibility**
  - Did you carry out the program?
  - What component did you find most useful?
  - What component did you end up altering or abandoning?
  - What are your suggestions for improvement?

• **Generality**
  - Proportion of dogs adopted during baseline and experimental time points
    - Automated data collection
    - Adoption rates across time points

• **New Questions**
  - Return rates across time points
Limitations and Future Directions

• Plenty!

• Data collection
  • Volunteers vs. staff vs. adopters
  • Over-representation of adoptions?

• Dog population
  • Some shelters specialize in difficult-to-adopt dogs

• Future Direction
  • Refine and distribute
Thank you!

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By state

Proportion of meet-and-greets ended in adoption

AZ | CA | TX | MA

State