

# “What Do You Want?” : Teaching Dogs to Request Items and Activities

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## Abstract

This study evaluated the use of operant conditioning to train domesticated dogs to request items or activities via a modified communication board using least-to-most prompting and error correction. First, the dogs were taught basic commands. Next, each picture card was paired to the actual item it represented. Finally, dogs were assessed on their ability to discriminate between the trained pictures. The dogs mastered each phase, acquired primary reinforcers faster than secondary, and responding generalized to untrained picture cards.

## Introduction

- Dogs have been known to communicate with humans in many different ways and can not only attend to, but also show a high level of responsiveness to a variety of cues within their environment to gain access to reinforcers.
- A border collie named Chaser was able to identify over 1,000 toys reliably by name and discriminate between the different toys by their proper names. Chaser was also able to identify a new novel toy with a new name based on exclusion, having mastered the names of the two previous items, she chose the other novel object (Pillely & Reid, 2011).
- Dogs are also able to not only attend to pictures of items but to retrieve them based solely on the picture they are shown (Kaminski et. al, 2009).
- Sofia, who was selected as a puppy was taught to use an electronic keyboard to request various items within the experimenter’s home. The dog was first taught to “touch” each individual symbol before gaining access to the object or activity. Each individual symbol was then moved to a full electronic keyboard. This study demonstrated that the dog could be successful at using the keyboard to communicate requests even after training was completed (Rossi & Ades, 2008).

## Method

### Subjects

Two pet dogs, Kobe, a 10 year-old Akita mix and Ian, an 11 year-old Border Collie were the subjects of the present study. The dogs lived within their owner’s care throughout the study.

### Materials

The materials used in this study included the picture communication board and basic items (e.g., food) and preferred activities (e.g., toys, going outside) and highly preferred dog treats. A video camera (i.e., an iPhone 8) was also used to film portions of the study.

### Design

This study was conducted as a multiple baseline design.

## Procedure: Phases and Training Sessions

During each phase, each dog was trained separately. The mastery criterion for each command and picture card was 80% or above with a general vocal prompt across 2 sessions. Each training session lasted 15 to 20 minutes.

### Phase 1: Command Training

- Pre-training to learn basic commands
  - “sit”, “wait” and “touch” (i.e., place one paw on top of an item)

### Phase 2: Routine Training

- Pairing between the picture cards and the actual item or activity
- Picture cards were removed from the board and placed next to, or within proximity of the item on the card
- Prompted using a least-to-most prompting starting with a general vocal prompt until responding occurred
- If the dog errored or did not touch the card, error correction was implemented in which the most invasive prompt that previously produced responding was used

### Phase 3: Discrimination Training

- Discriminate between the mastered picture cards (i.e., for Kobe pet and food and for Ian food and toy)
- All individual pictures were placed onto one board
- Upon approaching the board. The dog was asked, “what do you want?”
- After touching a picture card the dog was immediately given the item that the picture represented
- The cards on the board were rotated after each selection



Note. Pictured above is Ian with the communication board used during the final phase of training.

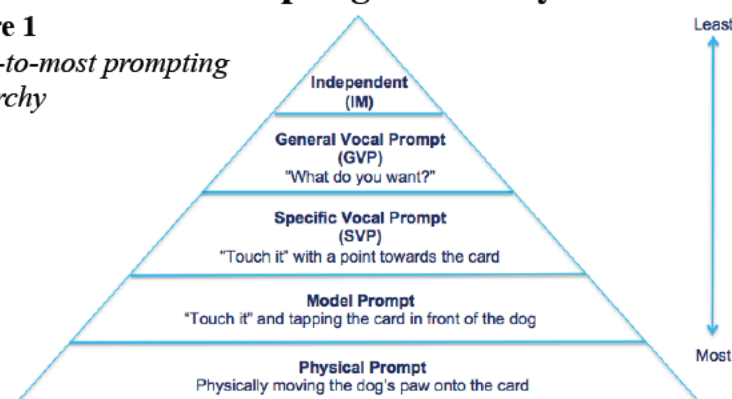


Note. Pictured above are Kobe (right) and Ian (left) after a training session.

## Prompting Hierarchy

Figure 1

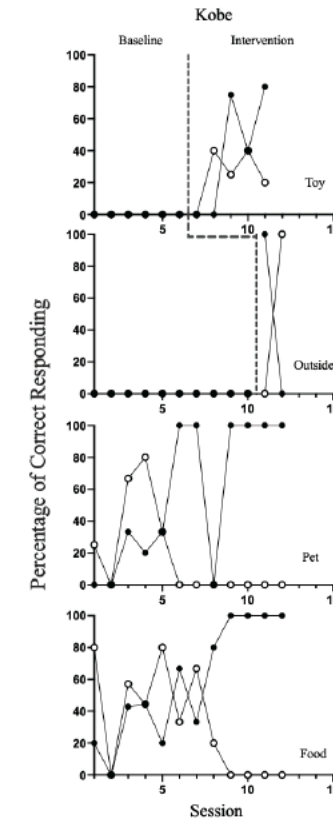
Least-to-most prompting hierarchy



Note. The figure above shows the prompting that was used throughout all phases of the study.

Figure 2

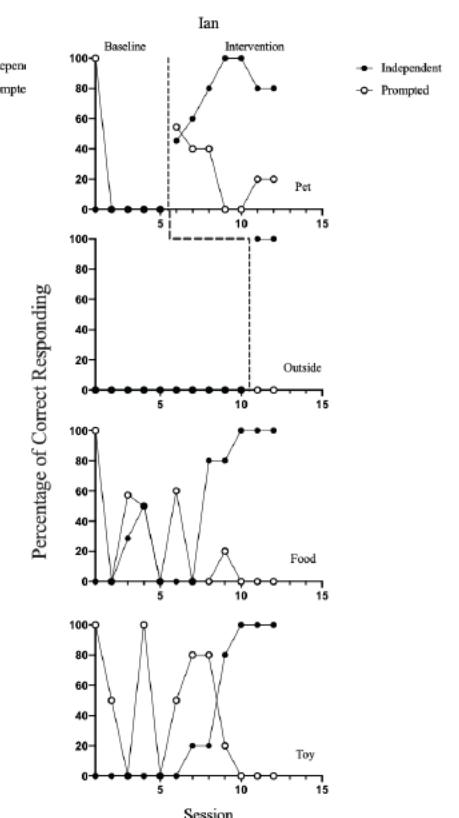
Kobe Training Sessions



## Results

Figure 3

Ian Training Sessions



Note. These data in figure 2 and 3 show the number of correct responding that occurred during routine training for each dog.

## Discussion

- This present study looked to determine if dogs can be successful in using a communication board to request items or activities
- The dogs were much older than dogs used in previous studies
- Each dog was successful at mastering each phase of the study
- The dogs did not have the opportunity to receive extensive training as the study was run within a 14-week time period
- During routine training, the dogs did not learn all cards with just a general vocal prompt and needed a more intrusive prompt (e.g., using a model prompt), to begin touching the cards independently
- There was a treatment effect on the other two cards each dog was exposed to which increased in their independence without being directly prompted.
- Future research should be conducted to further assess correspondence to the picture card and the item it represents
- Although more research needs to be conducted in this area, this study hopes to show that dogs do have advanced verbal capabilities