

Fear of Strangers in Dogs: Assessment and Clinical Therapy (Stranger Phobia in Shelter Dogs)

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Stranger phobia is an intense negative reaction exhibited by some shelter dogs in the presence of non-threatening strangers, a reaction that significantly jeopardizes their chances for adoption. Our paper details diagnostic criteria for stranger phobia in canids, describes a program of clinical therapy for treating the disorder, and presents case studies for three of our dogs. We used a cross-modal reinforcement technique that couples tactile praise and food reinforcement with a gentle auditory command of "come." We discuss three sub-phases of initial therapy and then describe a process of transfer to advanced stranger encounter sessions. Results indicate that our therapy methods are effective in treating stranger phobia in shelter dogs. Decreases in approach latency paralleled decreases in undesirable behaviors as well as increases in other desirable behaviors. Of particular note, each dog had a respective day in therapy when a major breakthrough occurred, marked by a significant decrease in approach latency. We describe this "aha" experience as a type of catharsis in which the dog's fear breaks down and is replaced with the concept of "come" and a sense of trust in the therapist. We further suggest that this catharsis is the critical turning point in treating stranger phobia in shelter dogs. We speculate that implementation of our methods of assessment and therapy may increase adoption and retention rates of at risk dogs.

Tuber, Hothersall, & Voith (1974) identified psychopathologies in *Canis familiaris* and developed the first formal applications of behavioral analysis to the treatment of psychological disorders in dogs. Clarifying this work, Hothersall & Tuber (1979) described pathologies such as separation anxiety and phobic reactions that parallel similar disorders in humans as well as quantifiable treatment methods. The basic therapeutic paradigm entails an initial veterinary examination followed by an individualized program of therapy for the dog and respective guardian utilizing techniques based on Breland & Breland's (1951; 1961) applied animal psychology and Wolpe's (1958) systematic desensitization. Animal clinical therapy based on principles of behavioral analysis has become more common in recent years and has achieved increasing scientific credibility (Dunbar, 1998; Lachman & Mickadeit, 1999; Oliver, 1998; Pryor, 1984). However, the case studies described by these clinicians typically focus on pet and show dogs. It is reasonable to assume that homeless or shelter dogs are particularly at risk for a variety of psychological disorders, and thus, we have been developing an assessment and clinical therapy program for the dogs at our local shelter.

Shelter dogs, unlike most companion dogs, face a myriad of potential psychological problems. Invariably their early experiences are not formative, often arriving at shelters with a history of abuse and loneliness. In addition, shelter life itself is not conducive to their psychological well being. While some dogs adapt better than others, we have found that many of them suffer from behavioral disorders that are not easily corrected with traditional obedience training techniques. Such psychological problems significantly impede the chances for adoption or retention by a new guardian, thereby perpetuating the disturbed psyche. One of the most

serious disorders that we have encountered is a syndrome that we denote as stranger phobia.

Stranger phobia is an intense negative reaction exhibited by shelter dogs in the presence of non-threatening strangers, a phobic reaction that significantly jeopardizes any chance for adoption. A typical stranger encounter is highlighted by an immediate escape behavior response. If escape is not possible (e.g., the dog is in an enclosed kennel run), the syndrome entails frantic pacing, whining or growling, tucking of the tail, cowering, loss of bowel control, and culminates in intense trembling reminiscent of anxiety attacks in humans. Patterned after the *DSM-IV* (1994) diagnostic criteria for specific and social phobias in humans, we have formalized stranger phobia in dogs using the criteria presented in Table 1. Herein, we describe assessment and clinical therapy case studies for three of our dogs diagnosed with severe stranger phobia.

Method & Results

Therapy sessions took place in a small, enclosed room that was isolated from the kennel compound and other shelter dogs. Methodology varied depending on the individual dog, but in general, our eclectic paradigm involved a series of one-on-one sessions with the therapist designed to relax the dog. Using techniques described by Lachman & Mickadeit (1999) and Oliver (1998), the sessions began with the therapist sitting on the floor while yawning and avoiding eye contact with the patient. Later in the session, we used a cross-modal reinforcement technique that coupled tactile praise and food reinforcement with a gentle auditory command of "come." We selected the come command as part of therapy because a conditioned approach response is incompatible with the escape behavior evidenced in a stranger phobic dog (see Pryor, 1984). Once a dog was responding favorably with the therapist (a decrease in approach latency coupled with an increase in desirable behaviors such as tail wagging), we began stranger encounter sessions designed to desensitize the dogs to non-threatening strangers.

Dogs were treated ethically, and we were prepared to abandon immediately any techniques that resulted in untoward reactions by our patients. In addition to therapy, all dogs received individual fun time excursions with the therapist. Below is a profile of our work thus far. We videotaped all therapy sessions and reviewed them to quantify frequency of behaviors and approach latency. Prior to therapy, all three dogs avoided human contact with the shelter volunteers and visitors.

Blackie

Blackie is a spayed eighteen-month-old small chow mix who has been at the shelter for the past year. We suspect that she was the victim of abuse as a puppy, and in conjunction with a year of shelter life, Blackie was a prime candidate for therapy intervention. Prior to therapy, she ran free in the shelter compound and suffered from an extreme case of stranger phobia, never being touched by humans except for one trip to the veterinary for her shots and spaying.

Our first task was to confine Blackie to her own kennel run and adapt her to wearing a harness so that she could be escorted to and from the therapy room. She received twenty-minute therapy sessions over the course of twenty-three days. Each session consisted of a five-minute acclimation phase in which the therapist sat on the floor, yawning and avoiding eye contact.

During the next ten minutes, the therapist approached Blackie and coupled tactile and food reinforcement with a gentle auditory command of come. For the final five minutes, the therapist backed away from Blackie and repeated the come command five times, allowing the dog at least thirty seconds to approach.

The top panel of Figure 1 presents Blackie's mean approach latency across twenty-three days of therapy. A major breakthrough occurred on Day 9 when Blackie began responding to the command. Because of her intense case of stranger phobia, we have not yet intentionally introduced her to any stranger encounter sessions. However, it is interesting to note that Blackie recently approached the founder of the Humane Society for food reinforcement during an unplanned encounter. In addition to her therapy sessions, Blackie is also receiving fun time excursions now that she has acclimated to her harness and walking on a lead. We believe that with continued therapy, Blackie's prognosis is good but will ultimately be dependent on her being adopted to a good home for any chance of a full recovery.

Mr. Walker

Mr. Walker is a neutered four-and-one-half-year-old walker coonhound who was found wandering around Gurdon, Arkansas three years ago. Like Blackie, he freely roamed around the shelter compound avoiding any significant contact with humans including the shelter volunteers.

Mr. Walker's therapy sessions began with five minutes of acclimation followed by five minutes of the cross-modal reinforcement. Because of his willingness to work in the one-on-one atmosphere, he received twenty thirty-second "come" trials during the last ten minutes of each session. Therapy continued for seventeen days at which time we elected to introduce the dog to stranger encounter sessions.

Mr. Walker received the usual acclimation procedure to begin these sessions, and then a research assistant unknown to the shelter dogs posed as a stranger. The stranger appeared at an entrance to the therapy room and sat down with her back to the dog. She held food reinforcement in her hand behind her back and repeated the come command ten times during a five minute encounter. After the stranger left, Mr. Walker received a five-minute debriefing session with the therapist.

The middle panel of Figure 1 presents Mr. Walker's mean approach latency data for seventeen days of therapy and four days of stranger encounter sessions. As can be seen, Mr. Walker had a breakthrough similar to Blackie's on Day 5 of therapy. However, he failed to respond favorably to the stranger encounters, becoming rigid and immobile while keeping his eyes on the stranger. Curiously, after the stranger departed, Mr. Walker immediately went to the therapy room entrance and peeked around the corner to see where the stranger went. Also of note, it took him several minutes into the debriefing phase before relations with the therapist returned to the previous level of trust.

Unfortunately, Mr. Walker was let out of his kennel run by a volunteer worker in the midst of his stranger encounter therapy, disrupting his progress. We are continuing to work with him and consider his prognosis to be good. We anticipate that with continued stranger encounter

sessions, Mr. Walker will experience a significant breakthrough similar to the catharsis during initial therapy.

Special

Special is a spayed eighteen-month-old small terrier mix who has been at the shelter for the past year save for a five-day adoption fiasco. Special was the first dog we worked with and received previous stranger desensitization when we began our clinical therapy program. Her initial progress was noted by a surprise adoption, but unfortunately, her new guardian did not provide appropriate out-shelter attention, returning her after only five days. Thus, we began anew with modified therapeutic methods.

The first phase of Special's therapy paralleled that of Mr. Walker as did her first four days of stranger encounter sessions. Because of her promising progress, we opted to move her into a second stranger encounter phase in which the stranger faced the dog while voicing the come command.

As can be seen in the bottom panel of Figure 1, Special experienced the same catharsis as our other dogs on Day 3 of therapy. Most encouraging is her positive transfer during the stranger encounter phases. We believe the prognosis for Special is excellent, and we anticipate completing her stranger phobia therapy with a final phase of multiple stranger encounters.

Discussion

Results suggest that our therapeutic technique is effective in treating stranger phobic reactions in shelter dogs. Our selection of the come command manifests this effectiveness in significant declines in approach latencies and undesirable behaviors (cowering, whining, loss of bowel control, tucking of tail, pacing, and escape behavior) coupled with desirable ones such as tail wagging and paw presentation. We believe our method of quantifying behavior during therapy lends credibility to the field of animal clinical psychology. We can only speculate at present, but we believe enhancing the psychological health of shelter dogs will ultimately lead to significant increases in adoption and retention rates for at risk canids. We recommend that potential guardians be instructed in our methods and assume the role of therapist during transition between shelter and home life. Once the dogs are adopted into good homes, we imagine that the stranger phobia will completely dissipate in a majority of cases .

From a learning perspective, a most interesting finding is the dramatic drop in approach latency manifested by all three dogs during the initial therapy phase: Blackie on Day 9, Mr. Walker on Day 5, and Special on Day 3. These striking results are reminiscent of Köhler's (1925) description of insight learning or what we sometimes refer to as the "aha" experience. Paralleling psychoanalytic schools of thought, we have described this breakthrough in therapy as a type of catharsis in which the dog's fear breaks down and is replaced with the concept of "come" and a sense of trust in the therapist. Whereas our therapy method was gradual like Wolpe's (1958) systematic desensitization, this sudden change in the dog's behavior is more reminiscent of a successful flooding technique. Whatever the explanation for this phenomenon, we suggest that the catharsis is the critical turning point in treating stranger phobia in shelter dogs. Although

none of our dogs have successfully completed the stranger encounter sessions with multiple strangers, Special's data suggest that a similar catharsis may occur in the stranger encounter phases of therapy.

We believe we have made a positive difference in the lives of our dogs, and we hope overcoming stranger phobia will soon free them of shelter life. We have also discovered that developing and maintaining an in-shelter and out-shelter clinical therapy program for dogs is an enormous and sometimes overwhelming venture. The aspiring animal clinical therapist should be forewarned that this type of work is extremely time-consuming and requires significant commitment, not unlike psychotherapy for humans. We hope our methods of assessment and therapy in the treatment of stranger phobia will be of use to other colleagues dedicated to improving the psychological health of shelter animals.

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Table 1

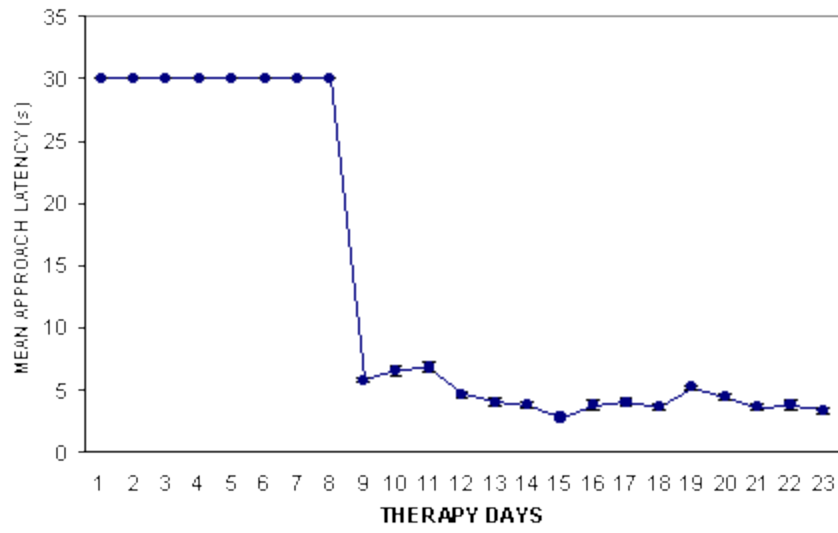
Diagnostic Criteria for Stranger Phobia in Canids

- A. Marked and persistent fear that is excessive or unreasonable, cued by the presence or anticipation of non-threatening strangers.
- B. Exposure to the stranger invariably provokes an immediate anxiety response, which may be expressed through attempts to escape, frantic pacing, whining or aggressive behaviors such as barking and growling, cowering, loss of bowel control, and intense trembling.
- C. The stranger is avoided if at all possible. Forced contact is endured with intense anxiety or distress.
- D. Stranger avoidance, anxious anticipation, or distress in a forced contact situation interferes with the overall well being of the dog and with his or her opportunity to be adopted by potential new guardians on their visit to the dog shelter.
- E. The anxiety or phobic avoidance associated with the stranger is not better accounted for by an underlying medical condition, separation anxiety, other obedience problems, or aggressive behaviors.

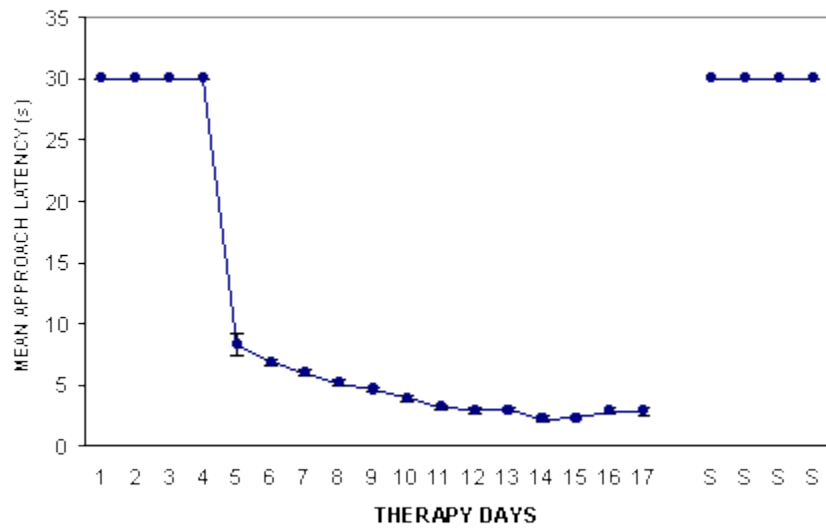
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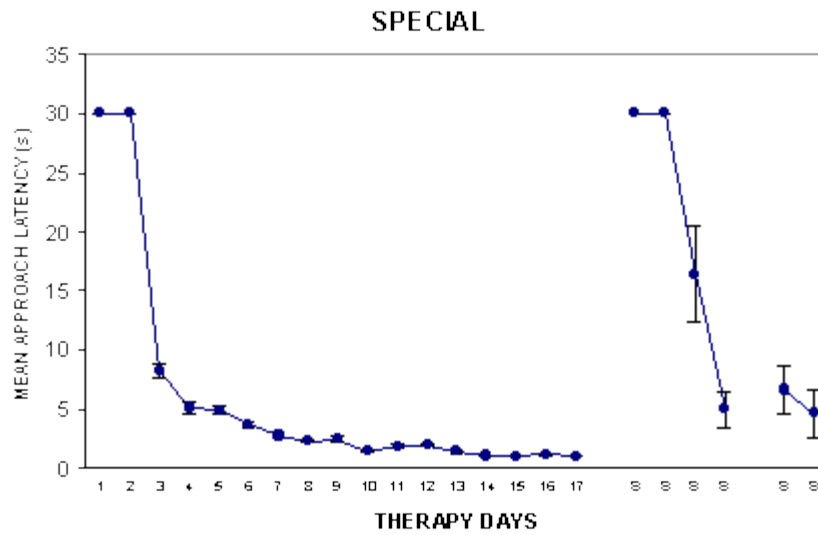
Figure 1. Mean approach latency (\pm SE) for Blackie across twenty-three days of therapy, for Mr. Walker across seventeen days of therapy and four days of stranger encounter sessions, and for Special across seventeen days of therapy and six days of stranger encounter sessions.

BLACKIE



MR. WALKER





Biographical Sketch

Melissa Chism graduated with honors from Henderson in May 2000. She is currently working in Arizona and applying for admission to graduate school in clinical psychology. Todd Wiebers is currently professor & chair of psychology at Henderson.

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