

Carin Lefkowitz,¹ Indira Paharia, Maurice Prout,
Dennis Debiak, and James Bleiberg

Animal-Assisted Prolonged Exposure: A Treatment for Survivors of Sexual Assault Suffering Posttraumatic Stress Disorder

ABSTRACT

This paper proposes the development of a new model of treatment for survivors of sexual abuse suffering from Posttraumatic Stress Disorder (PTSD). Foa, Rothbaum, Riggs, and Murdock (1991) and Foa, Rothbaum, and Furr (2003) support Prolonged Exposure (PE) as a highly effective treatment for PTSD. However, PE can be intimidating to survivors, contributing to hesitancy to participate in the treatment. This paper posits that animal-assisted therapy (AAT) will decrease anxiety, lower physiological arousal, enhance the therapeutic alliance, and promote social lubrication. The paper also posits that AAT will enhance the value of PE by making it more accessible to survivors, increasing social interaction, and perhaps decreasing the number of sessions required for habituation to the traumatic memories.

Sexual assault occurs far too frequently and affects survivors in a myriad of ways, including the potential development of Posttraumatic Stress Disorder (PTSD). Psychotherapy for PTSD can be highly effective. However, the most effective treatment models include some form of exposure to feared memories or situations, which can be frightening to survivors. Additionally, the most effective treatment models for

anxiety disorders such as PTSD also have high rates of attrition, although the reasons behind the attrition are not entirely clear (Hembree et al., 2003).

Altschuler (1999) called for a treatment model for PTSD that would incorporate animal-assisted interventions. The treatment model proposed here, named Animal-Assisted Prolonged Exposure (AAPE), seeks to fulfill Altschuler's vision. It is proposed that fusing animal-assisted therapy with existing treatments for PTSD could encourage hesitant survivors to participate in, and complete, the treatment by making more tolerable demands and could positively alter survivors' perceptions of themselves and the world.

Sexual Assault and Posttraumatic Stress Disorder

Sexual assault occurs at epidemic rates in the United States. Although both men and women can be victims of sexual assault, women account for the vast majority of victims. One study found that almost 13% of women in a national sample had suffered a completed rape, while 14% endured some other form of sexual assault (Resnick, Kilpatrick, Dansky, Saunders, & Best, 1993). The authors estimated that more than 12 million women in the United States would be raped, while almost 14 million women would suffer some other form of sexual assault. The frequency of survivors seeking psychological treatment is on the rise, indicating the need for effective treatment approaches for survivors of sexual assault (Rape, Abuse, and Incest National Network, n.d.). In light of the aforementioned statistics, this paper will consider women as the primary clientele, although there is no reason to assume that the new treatment model would not work similarly for men.

Sexual assault and rape are the traumas most commonly associated with PTSD in women (Kessler, Sonnega, Bromet, Hughes, & Nelson, 1995). The diagnosis of PTSD includes three components:

1. re-experiencing the traumatic event (nightmares, flashbacks);
2. persistent avoidance of trauma-associated stimuli (including memories and feelings) and numbing of general responsiveness; and
3. increased physiological arousal (American Psychiatric Association, 2000).

Immediately following a sexual assault, most women experience symptoms similar to PTSD. These symptoms tend to diminish over time, with about

half the survivors recovering completely within three months. However, 50% of women do not show much improvement in future assessments and typically require treatment to recover. (Foa & Rothbaum, 1998; Rothbaum, Foa, Riggs, Murdock, & Walsh, 1992).

Traditional Interventions

A number of treatment approaches have been used to treat PTSD. The research literature supports the use of cognitive behavioral therapy (CBT) in the treatment of PTSD and other anxiety disorders. Although all CBT approaches have been shown to be effective, studies that compared Prolonged Exposure (PE) with the other approaches concluded that PE is the most effective treatment for PTSD, as measured by symptom reduction immediately after treatment and at follow-up (Foa et al., 1999; Foa, Rothbaum, & Furr, 2003). PE has been referred to as “the best available treatment package” for PTSD (Resick, Nishith, Astin, & Feuer, 2002, p. 867).

PE combines a number of interventions aimed at reducing the variety of symptoms experienced by clients suffering with PTSD, including psycho-education, relaxation techniques, and guided exposures to both feared memories and real-life situations. Unfortunately, although the literature on PE suggests that it is the most effective treatment package available for PTSD, up to 26% of participants will drop out of PE and other CBT treatments aimed at reducing PTSD symptomatology: Even more survivors refuse to participate at all (Hembree et al., 2003; Resick et al., 2002; Riggs, 2004). These rates contrast with the 11% attrition rate for other treatment conditions, including non-CBT treatment and wait-list conditions. Although research has identified it as a highly effective treatment, PE is of little benefit if survivors do not commit to it. Therefore, any opportunity to make PE more accessible to survivors must be considered seriously.

Rationale for a New Model of Animal-Assisted Therapy

Altschuler (1999) called for the integration of animal-assisted interventions into treatments for PTSD. He was inspired by observations that some clients' PTSD was resistant to treatment and anecdotal evidence from his clients that

they were less anxious in the presence of their companion animals. Although an exhaustive review of the positive benefits of AAT is outside the scope of this paper, a brief review of benefits that apply to PTSD treatment is presented below.

AAT in Psychotherapy

For many survivors suffering with PTSD, reliving their trauma initially is terrifying. Often, even thinking about the trauma makes the survivor feel as if the experience is being repeated in the present. In addition, reliving the trauma in the presence of a therapist, a relative stranger to the survivor, is intimidating (Hensley, 2002; Weinstein & Rosen, 1988). Yet, this is exactly what PE requires of the survivor—reliving the trauma repeatedly, experiencing all the negative emotions associated with the trauma, and accomplishing all of this in the presence of a relative stranger. Certainly, the therapist's abilities to connect quickly with the survivor and to present himself or herself as trustworthy in the first session affects the survivor's willingness to continue with treatment.

Observations and theories set forth by animal-assisted therapists suggest that incorporating AAT components into the PE treatment (or any other psychotherapy) might help therapists to build positive therapeutic alliances quickly. Fine (2000, 2004) observed that nonhuman animals were instant icebreakers in therapy, with his dogs often meeting the clients at the door and his birds "speaking" to the clients. Almost all clients immediately began talking about the presence of the animals, helping to build rapport quickly between client and therapist. Therapists using AAT also appear less threatening and more empathic to clients. Evolutionarily, humans have learned to judge the safety of an environment by the amount of anxiety exhibited by animals. The "calm" animal in the therapy session signals to the survivor that the office is a safe place and that the therapist is a safe person (Kruger, Trachtenberg, & Serpell, 2004). This caveat illustrates the importance of using a therapy dog who has been assessed properly and trained for therapy work.

In addition to fostering a positive therapeutic relationship, the presence of the therapy dog also can assist with specific PE techniques. PE helps the individual process the traumatic event through imaginal reliving and *in vivo* expo-

sure. Imaginal reliving involves the survivor's reliving the traumatic event in her head. *In vivo* exposure involves the individual's confronting situations that she avoids because they remind her of the assault. They are practiced both in session and at home. Both techniques promote habituation to fear and anxiety by having the survivor stay with the memory and the situation until anxiety begins to decrease naturally.

Until entering treatment, almost all survivors with PTSD have practiced avoiding stimuli that remind them of the trauma and have tried to ignore memories and thoughts of the event. Because anxiety likely decreases somewhat when the survivor pushes the thoughts out of her mind, avoidance behavior is reinforced. Because the survivor has not processed, and made sense of, the event, however, the memories return. The survivor is unaware that tolerating the fear and anxiety without distracting herself will lead to natural decreases in anxiety and fear by making the memories and situations appear less dangerous and giving her a sense of control over the trauma.

On a related note, research is beginning to focus on the impact that animals have on human stress and anxiety. In one study, simply talking to their animals was found to lower blood pressure and heart rate in pet owners, even lowering blood pressure below resting states (Friedmann, Katcher, Thomas, Lynch, & Messent, 1983). In another study, researchers compared levels of stress between stockbrokers who adopted pets and those who did not (Allen, Shykoff, & Izzo, 2001): The stockbrokers were receiving drug therapy for high blood pressure. While under stress, the participants who adopted pets had blood pressure increases less than half that of the participants without pets—regardless of whether they were taking the drug. In light of this research, one could theorize that the presence of the dog might quicken habituation during imaginal and *in vivo* exposures, helping quickly to decrease physiological stress responses. However, it would be important to allow the survivor to reach an optimal level of anxiety before introducing the dog: Decreasing anxiety prematurely before it peaks may decrease the effectiveness of exposure therapy (Foa & Kozak, 1986).

Melson (2004) understood the attachment between humans and nonhuman animals from both an evolutionary and a self-psychology framework. According to the biophilia hypothesis, humans have a heightened awareness of, and interest in, animals and plants because of their evolutionary interdependence.

Self-psychologists theorize that humans develop a sense of self through their relationships with others. Therefore, humans typically are sensitive to, and interested in, their interactions with animals. When an individual interacts with, and cares for, an animal, the individual comes to view herself as capable and nurturing. In addition, feeling able to handle the animal's unpredictability can foster a sense of competence in the face of unpredictable challenges. Accordingly, the survivor should be encouraged to care for animals outside therapy sessions. This may include volunteering at a shelter, playing with her own dog, or adopting an animal.

Animal-assisted interventions have been found to increase compliance in psychotherapy, especially with client populations who inconsistently attend therapy sessions. Beck, Seraydarian, and Hunter (1986) found that participants in group sessions attended more consistently and that the participants were more active when the group involved AAT. Half the patients in the AAT group were discharged before the end of the study, whereas none of the participants in the control group were discharged during that time.

AAT also has been effective with clients who had not responded to other treatment. In one study, the introduction of dogs to a hospital ward affected even those patients who were not receiving AAT directly. Those clients who interacted with the dogs and exhibited increased social interaction went on to initiate interactions with those clients who were not receiving AAT (Corson, Corson, Gwynne, & Arnold, 1977). Similar results were found in an Ohio nursing home. The residents who interacted with animals became more self-reliant and were more highly motivated (Cusack, 1988).

Fine (2004) sets forth two hypotheses to explain why animals have such positive effects on psychotherapy. First, pets are perceived as being available and interested in interacting with humans. Second, not many social skills are required to get an animal's positive attention, whereas humans are far more aware, and judgmental, of others' social skills. Other theorists suggest that therapy animals will respond most to individuals who clearly are isolated and withdrawn, perhaps because such individuals are less likely to respond aggressively to the animal (Cusack, 1988). Taken together with Fine's hypotheses, these observations suggest that animals used in psychotherapy are likely to respond to those individuals who might have the most difficulty connecting with the therapist or any other unfamiliar person, especially those coping

with trauma of an interpersonal nature. Indeed, a hallmark of PTSD is emotional numbing that sometimes reveals itself as detachment or estrangement from others (American Psychiatric Association, 2000).

Animals also can ease emotional burdens placed on the therapist. When discussion becomes deeply emotional, the therapist may want to comfort the client in some way, perhaps by hugging the survivor or holding the survivor's hand. Because of existing ethical standards, the therapist may be unwilling to express sympathy in these ways. However, a dog has no such concerns and may lick the survivor's hand or put his head on her knee. In this way, sympathy and comfort are expressed physically to the client without impinging on the therapist's professional boundaries (Fine, 2004). This is especially helpful when therapists and survivors are discussing hot spots or when PE seems overwhelming. Fortunately, household animals generally are attuned to shifting affective states in humans and respond to subtle affective cues (Fredrickson & DePrekel, 2004).

Reichert (1994) developed a model of animal-assisted group therapy for girls who had been abused sexually. A Dachshund assisted the group in easing tension and anxiety by becoming an object on which the girls could project their feelings and by allowing the girls to pet him. In addition, the girls could choose to disclose their abuse stories in the dog's ear before disclosing them to the group, allowing them to take smaller, more manageable, steps in the therapy. Choosing whom to disclose to and how to do so gives back power and control to the traumatized child.

Other Benefits of AAT

Companion animals can provide long-term, stress-reducing social support by making the human feel cared for, loved, and part of a network with mutual obligations. In addition, animals can improve psychological health by acting as social lubricants, encouraging relationships with people (Serpell, 2000). Studies show that even in unfamiliar places, the presence of a dog increases the likelihood of social contact between the dog's owner and other people. Messent (1983) found that pet owners also might place themselves in social situations such as taking a dog to a nearby park. Furthermore, dog owners who walk along a particular route with their dogs develop friendships quickly

with other people who frequent the same area. The mere presence of animals can spark conversation in any situation and may make the individual with the animal appear more approachable (Sachs-Ericsson, Hansen, & Fitzgerald, 2002).

Because social support between humans has been shown to buffer or ameliorate the negative health effects of chronic life stress and disease, some theorists have extrapolated that the feelings of being cared for, and loved by, an animal can provide humans with similar health benefits (Serpell, 2000). Indeed, among individuals who have little social support from other humans, dog companionship has been found to be associated with better physical and psychological health (Allen et al., 2001; Sachs-Ericsson et al., 2002).

Being accompanied by a dog can make humans feel safer and more protected in new situations (Messent, 1983). As discussed previously, a survivor often establishes a comfort zone and fears that she will not be able to protect herself if she travels outside that zone. She thereby loses her sense of independence and becomes less likely to meet new people and maintain interpersonal relationships (Foa & Rothbaum, 1998; Sachs-Ericsson et al., 2002; Weinstein & Rosen, 1988). Therefore, the feelings of safety induced by her canine companion can help the survivor challenge those fears and can lead to the survivor's re-evaluation of the world as relatively safe and of herself as strong and competent. An important caveat we will discuss later, however, is the danger of the survivor's misattributing feelings of safety and competence to her canine companion.

Concerns About AAT

Despite the wide range of benefits that animals can have on humans, AAT is not appropriate for use with every client, in every context. Animals can be harmful to some clients because of allergies or infections, and some environments are simply not conducive to maintaining animals. Schantz (1990) posited that preventive measures can prevent most of these problems. A broad review of such measures is beyond the scope of this paper. For thorough reviews, we refer the reader to the Delta Society (1996) and Schantz (1990). What follows is a discussion of concerns more specific to combining AAT with PE.

The most common concerns raised by therapists using AAT are animal fatigue and burnout (Iannuzzi & Rowan, 1991). The Delta Society (1996) dictates that therapy animals should receive a rest period after every one to one-and-one-half hours of work and should not work more than five hours per day. However, animals have their own, individual limits before becoming fatigued (Iannuzzi & Rowan). The owner should become familiar with that limit before establishing a formal AAT program.

Of course, many therapists reasonably will be concerned about how to prevent animal fatigue and burnout, while not diminishing their financial success. How can therapists incorporate AAT into their practices without having to decrease the number of clients seen per day? PE sessions usually are scheduled to last 90 minutes. After each session, the therapist would usually set aside some time in between appointments, perhaps 15 to 30 minutes, to complete paperwork and take a mental break. In the proposed model, a 30-minute break should provide enough time for the therapist to complete paperwork and take the dog for a walk. In addition, office hours regularly are set aside for staff meetings, supervision, lunch breaks, and other professional tasks. With a little creativity in scheduling the day's tasks, these times also could serve as scheduled breaks for the dog. Providing the opportunity for dogs to retreat to a safe place during a session also lets the dogs monitor their own energy and rest when needed.

Typically, PE is practiced in outpatient therapy offices and clinics, but undertaking AAT in the average therapy office requires some creative adjustments to the environment. The dog should have a bowl with water, a comfortable rest area, and a hiding spot to escape to when overwhelmed. Some of these particulars—placing a favorite blanket next to a water bowl in a corner of the therapy office—are easy to implement. Providing a hiding spot may seem difficult at first. However, this can be accomplished even in an average-size office by giving the dog easy access to a large closet (furnished with a pet bed and water) or by using a simple room divider to create a private space for the dog.

Animal-Assisted Prolonged Exposure: A Treatment for PTSD, Sexual Assault Survivors

No specific models of animal-assisted psychotherapy have been developed for treatment of PTSD. Animal-Assisted Prolonged Exposure (AAPE) is presented as a fulfillment of Altschuler's (1999) vision. Unless otherwise noted, the descriptions of PE that follow are taken directly from Foa and Rothbaum (1998).²

In the office, the therapist's own dog will serve as the therapy dog who assists psychological interventions. Outside the office, the survivor may accomplish homework assignments with the assistance of her own dog or a friend's dog with whom the survivor already feels comfortable. A detailed description of the proposed treatment model is provided below.

Before Session #1

Before initiating AAPE, the survivor's willingness to work with a dog must be assessed, as well as any physical concerns such as allergies or immune deficiency. As suggested by Schantz (1990), the survivor should be asked whether allergic reactions occur only to specific breeds and whether her allergies can be controlled easily with medications that will not induce drowsiness. If the client refuses to work with a dog because of phobia, illness, or allergy, she will be referred to a non-AAT therapist specializing in treatment of PTSD. Francis (1991) suggested that any client who is not severely allergic or phobic of dogs should be encouraged to attend an initial AAT session. Francis observed that even clients who are skeptical about the program are likely to agree to the program once they get to know the dog.

Session #1

Clients meet the therapist and the therapy dog in the first session. Cusak (1988) noted that petting a familiar dog is more relaxing than petting a strange dog. In fact, petting a strange dog actually increases heart rate. Odendaal (2000) found reduced stress in humans—measured by a significant decrease in blood pressure—after 5 to 24 minutes of positive interaction with the dog. Therefore, the survivor will be encouraged to interact with the dog for 10 or

15 minutes (Granger, Kogan, Fitchett, & Helmer, 1998; Sachs-Ericsson et al., 2002). During this time, the therapist can ask about the survivor's previous experiences with animals, inquire about her reaction to the therapy dog, and ask the survivor to clarify any of the information related to animals that she provided in the intake paperwork.

After the client has spent some time forming a relationship with the therapy dog, the therapist describes the AAPE treatment program and the rationale behind it. Sessions are 90 minutes in length; typically, treatment is scheduled to last 10 weeks. In the 9th session, the therapist and survivor will decide whether three additional sessions are needed or whether they will terminate in the 10th session. The therapist provides the survivor with an overview of imaginal exposure and *in vivo* exposure. The therapist also warns the survivor that, initially, her symptoms of depression or anxiety may increase when treatment begins.

The therapist describes how the dog will participate in therapy and the rationale behind AAT. The discussion should include a description of how animals can decrease anxiety and stress, how they promote social interactions, and how the survivor might receive comfort from the dog. In addition, the therapist might demonstrate what commands the dog responds to and explain some ways in which the dog may behave toward the survivor during sessions.

In the sessions, the survivor is free to interact with the dog and the dog is free to respond to the survivor. However, appropriate behavior toward the therapy dog must be discussed at length. The zero-tolerance for animal abuse rule must be described clearly, including what will constitute abuse in these sessions and making clear that abuse of the animal will lead to immediate termination of the animal-assisted component of treatment and referral—if necessary—to another therapist. Although the therapist and survivor may explore any gray-area situations that arise, the therapist reserves the right and responsibility to terminate the animal-assisted portion of treatment at the therapist's own discretion.

The therapist also should explain that the dog may wish to retreat to a designated safety zone to rest during a session and that the dog should not be disturbed during that time. Although these rules initially may seem rigid or

unnatural, the therapist should explain that these rules exist to ensure a safe and comfortable therapy space for the survivor, the therapist, and the dog. The therapist may elucidate this point further by describing the training and medical evaluations the dog has received to ensure the safety of the survivor. So that the survivor can give true, informed consent for treatment, the therapist must be careful not to minimize the risks that exist with AAT.

Because evidence suggests that being accompanied by a trusted animal can reduce anxiety in humans, the survivor may wish to be accompanied by a dog during *in vivo* exposures. For this reason, the therapist should inquire as to whether the survivor has a dog (or other trusted animal companion) to accompany her during *in vivo* homework assignments. The survivor's being accompanied by a dog certainly is not a requirement of the treatment program—merely a suggestion. The survivor then should be encouraged to ask any questions she has about the treatment program.

In the final part of the session, the focus moves to breathing retraining. The retraining will be helpful, especially if the survivor has become anxious during the previous discussions. A brief rationale for the retraining procedure is provided. The survivor is taught to inhale normally and exhale slowly while saying a calming word, such as “relax.” After exhaling, the survivor pauses for four seconds before inhaling again. This process is repeated for 10-15 cycles. The survivor is asked to practice the breathing retraining until the next session at least twice per day, every day. In addition, she is given a Breathing Retraining handout that reminds her of the procedure and the rationale behind it.

Session #2

The second session is devoted to eliciting the survivor's reaction to the previous session, collecting information about the survivor's assault history, and identifying some ways in which the assault has affected the survivor. The survivor is asked to describe her thoughts and feelings about the treatment program so far, and special attention is paid to any reported anxiety or hesitancy to return. The therapist may suggest some interventions to encourage a stronger connection with the dog (playing with the dog for five minutes) or to reduce anxiety (practicing breathing retraining before continuing or

restating the survivor's motivation for entering the treatment program). These interventions may help diminish the relatively high attrition rate reported in previous studies of PE (Riggs, 2004).

Having explored the survivor's reactions to the previous session, focus shifts to the assault. Using Foa & Rothbaum's (1998) Assault Information and History Interview (AIHI), the therapist collects information about the assault, the survivor's reactions to the assault, and historical information preceding the assault. If the survivor reports more than one assault, subsequent sessions will focus on the incident that the survivor deems most traumatic. The therapist is careful to note any ways in which the survivor reports using avoidance strategies to control fear and anxiety.

This information will be used later in treatment when formulating *in vivo* exposures. If the survivor becomes anxious during the assessment, the therapist assures her that this is a natural reaction to recalling the trauma and—with the survivor—decides whether it is necessary to practice the breathing retraining exercises or to take a short break before continuing with the assessment. Again, it is important to give the survivor a sense of control over the process.

After the AIHI is completed, the survivor's reactions to the assault are discussed. The therapist provides the survivor with the Common Reactions to Assault handout, which describes reactions such as guilt, re-experience of the assault, avoidance behaviors, depression, and changes in sexual arousal. Education about these common reactions helps to normalize her reactions to the traumatic event and to increase self-esteem (Hensley, 2002). The survivor is encouraged to identify which reactions she experiences, add any additional reactions not listed, and ask questions. For homework, the therapist asks the survivor to read the handout daily and to share the information with anyone she chooses.

Session #3

This session begins with a check-in during which the therapist inquires about the survivor's homework assignment and any significant events that occurred in the previous week. The survivor should be encouraged to express her and others' reactions reaction to the Common Reactions to Sexual Assault handout.

Following the check-in, focus shifts to introducing *in vivo* exposure and creating an exposure hierarchy. The therapist explains the concepts of fear, exposure, and habituation and how confronting feared (but realistically safe) situations will help the survivor process the traumatic experience by lessening pain and increasing feelings of self-efficacy. In addition, the therapist teaches the survivor to use the Subjective Unit of Discomfort (SUD) scale and rate anxiety on the scale at that moment.

The therapist then helps the survivor identify situations that the survivor avoids because of their association with the traumatic event. Some of this information has been collected during the completion of the AIHI and can be elaborated on in this session. The therapist should explain that the survivor will not be asked to subject herself to situations realistically unsafe either for her or the therapist and that each situation can be discussed in terms of its (objective) safeness before being added to the hierarchy. The therapist provides the survivor both verbal and written instructions for the exposures. The therapist instructs the survivor to stay in each situation for 30-45 minutes or until her rating on the SUD scale decreases by 50%. Until the end of treatment, the therapist assigns a new exposure weekly, beginning with situations that elicit an SUD rating of 40-60, each week moving further up the hierarchy. Because avoidance behavior will be reinforced if the survivor leaves the situation earlier than planned, the therapist must stress the importance of remaining in the feared situation. By the end of treatment, the survivor should be practicing each task daily. Some exposures, such as reading newspaper coverage of a sexual assault, may be practiced within the session. Others can be practiced outside the therapy office.

Often the survivor may be more willing to put herself into a feared situation if she can enlist the help of a “coach.” In PE, a coach is defined as a person whom the survivor trusts, a person who will help her feel safe during the exposure. In this treatment model, the notion of a coach is extended to include an animal companion who helps the survivor feel safe. Instead of a human coach going to the store with the survivor, the survivor could take a neighbor’s dog to the store with her. The nonhuman coach should be an animal whom the client already knows and with whom she feels comfortable. For the safety of the therapy dog, the therapy dog cannot accompany the survivor outside the regularly scheduled sessions. However, the therapist can

help the survivor identify other animals with whom she feels comfortable—such as a neighbor’s pet. Eliciting the assistance of another dog also helps the survivor generalize feelings of comfort and safety to other humans and animals outside the therapy. As happens with human coaches, the assistance of animal coaches should fade out progressively with each exposure session. At the end of the session, the therapist assigns homework—the first *in vivo* exposure.

Session #4

This session begins with a review of the homework assignment from the previous session. The survivor is given the opportunity to describe the experience and rate how successful she was. The therapist will provide feedback about the survivor’s performance and assign the next exposure homework assignment.

The remainder of the session will be used to introduce imaginal exposure. The therapist reviews information gathered from the AIHI and points out the survivor’s previous attempts at forgetting about the assault and pushing away intrusive memories. The therapist explains how the memories return in the form of flashbacks, nightmares, or general anxiousness whenever the survivor tries to push those memories away, suggesting that the assault is unfinished business. To decrease the frequency and intensity of symptoms, the survivor fully confronts the painful memories. This includes cognitive engagement in the form of recalling details and emotional engagement with the associated fear and anxiety. As the survivor allows herself to feel more and more of the avoided emotions, she will begin to experience habituation to her fear and anxiety. By practicing emotional exposure, both in sessions and at home, the distinction between the horrifying assault and harmless memories quickly will become clear (Jaycox, Foa, & Morral, 1998). To that end, each session is audiotaped so that the survivor can listen to the session at home.

After providing the rationale for imaginal exposure, the therapist explains the process step-by-step. The survivor is asked to close her eyes and recall the assault vividly. The survivor describes the events in the first person and present tense and is reminded to do so as necessary. She is encouraged to describe what she recalls through each of her five senses. Every 10 minutes,

the survivor is asked to rate her anxiety on the SUD scale. If her anxiety becomes overwhelming, the survivor can practice breathing retraining until she can return to the retelling. Each exposure session lasts 30 to 60 minutes. To fill this amount of time, the survivor may have to repeat the story several times. At the end of the exposure session, the survivor is asked to discuss her reactions to the exercise. The survivor again may choose to practice breathing retraining before leaving the office. Finally, the therapist asks the survivor to continue practicing *in vivo* exposures and to listen to the audiotape of the session every day.

Remaining Sessions

Homework is reviewed at the beginning of each remaining session—with the exception of the termination session; the survivor practices imaginal exposure for the majority of the session; and homework is assigned for the upcoming week. In the first two sessions of imaginal exposure (Sessions #4 and #5), the survivor decides how much detail to share. As treatment progresses, the therapist more actively encourages the survivor to expand on the details and include physiological and emotional reactions to particular details. As the survivor's SUD scale ratings continue to decrease from week to week, she is asked to spend more time discussing the hot spots in her story. In addition, special attention is paid to details that convey a sense of unpredictability or uncontrollability so that schema of dangerousness and incompetence can be reevaluated.

The final session of AAPE provides an opportunity to discuss progress, future goals, and feelings surrounding termination. The first half of the session is similar to previous sessions in that homework is reviewed and imaginal exposure is conducted. The second half of the session is used to discuss termination issues. The survivor is encouraged to discuss her experience with AAPE, what positive changes she notices, and any issues that she would like to continue working on following termination. The therapist shares feedback about the process, the survivor's progress, and suggestions for continued practice. As in other treatment approaches, some time is reserved for discussing the relationship between the therapist and survivor. What is different in AAPE is that the survivor has developed a relationship with the therapy dog, so the survivor should have the opportunity to discuss that relationship and

say “goodbye” to the dog in a special way. The therapist and survivor can discuss different ways of saying “goodbye,” such as petting, feeding, or playing with the dog at the end of the session.

It should be no surprise that many survivors will find the imaginal exposure process to be intimidating at the very least. The presence of the therapy dog is not expected to minimize the anxiety associated with the trauma, but the dog can participate in interventions aimed at decreasing the survivor’s hesitation to engage in the process and facilitate habituation. As in Reichert’s (1994) work with abused children, adult survivors in AAPE may choose first to whisper the details of the assault in the dog’s ear. They might also pet the dog as a tactile and grounding comfort. Although the presence of the dog should provide comfort to the survivor, using the dog in this way should be discontinued if it prevents the survivor from engaging emotionally in the imaginal exposure.

In this model, one additional session is required before treatment moves into the imaginal reliving stage. It might be argued that this extra session will make it less likely to be approved by insurance plans or that it constitutes a disadvantage over the efficiency of traditional PE. However, given animals’ ability to decrease physiological stress responses quickly in humans, clients may require fewer sessions before becoming habituated to the traumatic memory. Therefore, the survivor may require one less exposure session, offsetting the need for an extra session in the beginning.

Conclusion

Certainly, this project’s primary goal is to improve the treatment options available for survivors of sexual assault by making a highly effective treatment model more accessible. As a group, survivors of sexual abuse are incredibly strong and resilient—evidenced by their endurance beyond brutal and demeaning victimizations. Commonly, however, these survivors discount their strengths, viewing themselves as weak and worthless. To the survivor entering PE treatment, the descriptions of imaginal and *in vivo* exposures reasonably may evoke a sense of revictimization and fear. If the survivor then chooses to discontinue treatment, her view of herself as weak is reinforced. It is hoped that this new treatment model will encourage more survivors to complete

the difficult process of confronting their fears, so that their true strengths and competence can be realized fully.

The secondary goal of this project is to expand the AAT literature base. As it exists now, the writing on AAT suffers from a lack of scientific studies supporting its use. Although such studies are on the rise, almost all the literature presents anecdotal or qualitative support for AAT. If undertaken as a pilot study, the outcome measures of this treatment model could provide evidence that would strengthen the AAT literature and perhaps open new avenues of exploration.

* Carin Lefkowitz, Indira Palaria, Maurice Prout, and Dennis Debiak, Widener University
James Bleiberg, West Chester University

Notes

- ¹ Correspondence should be sent to Carin Lefkowitz, Villanova University, University Counseling Center, 800 Lancaster Ave., Villanova, PA 19085. E-mail: carinmarice@aol.com
- ² See Foa and Rothbaum (1998) for a more detailed description of PE, including verbatim rationales for treatment components and handouts to be used in the intervention.

References

- Allen, K, Shykoff, B. E., & Izzo, J. L. (2001). Pet ownership, but not ACE inhibitor therapy, blunts home blood pressure responses to mental stress. *Hypertension*, *38*, 815-820.
- Altschuler, E. L. (1999). Pet-facilitated therapy for posttraumatic stress disorder. *Annals of Clinical Psychiatry*, *11* (1), 29, 30.
- American Psychiatric Association (2000). *Diagnostic and statistical manual of mental disorders* (4th ed.). Washington, DC: Author.
- Beck, A. M., Seraydarian, L., & Hunter, F. (1986). Use of animals in the rehabilitation of psychiatric patients. *Psychological Reports*, *58*, 63-66.
- Corson, S. A., Corson, E. O'L., Gwynne, P. H., & Arnold, L. E. (1977). Pet dogs as

- nonverbal communication links in hospital psychiatry. *Comprehensive Psychiatry*, 18 (1), 61-72.
- Cusak, O. (1988). *Pets and mental health*. New York: Haworth.
- Delta Society (1996). Standards of practice for animal-assisted activities and animal-assisted therapy. Renton, WA: Delta Society.
- Fine, A. H. (2004, March). The AAT Rx for youth: Bridging research with clinical insight. In J. Serpell (Chair), *Can animals help humans heal? Animal-assisted interventions in adolescent mental health*. Conference held at the Center for the Interaction of Animals and Society, Philadelphia, PA.
- Fine, A. H. (2000). Animals and therapists: Incorporating animals in outpatient psychotherapy. In A. H. Fine (Ed.), *Handbook on animal-assisted therapy: Theoretical foundations and guidelines for practice* (pp. 179-208). San Diego: U.S. Academic Press.
- Foa, E. B., Dancu, C. V., Hembree, E. A., Jaycox, L. H., Meadows, E. A., & Street, G. P. (1999). A comparison of exposure therapy, stress inoculation training, and their combination for reducing posttraumatic stress disorder in female assault victims. *Journal of Consulting and Clinical Psychology*, 67 (2), 194-200.
- Foa, E. B., & Kozak, M. J. (1986). Emotional processing of fear: Exposure to corrective information. *Psychological Bulletin*, 99 (1), 20-35.
- Foa, E. B., & Rothbaum, B. O. (1998). *Treating the trauma of rape: Cognitive-behavioral therapy for PTSD*. New York: Guilford.
- Foa, E. B., Rothbaum, B. O., & Furr, J. M. (2003). Augmenting exposure therapy with other CBT procedures. *Psychiatric Annals*, 33 (1), 47-53.
- Foa, E. B., Rothbaum, B. O., Riggs, D. S., & Murdock, T. B. (1991). Treatment of posttraumatic stress disorder in rape victims: A comparison between cognitive-behavioral procedures and counseling. *Journal of Consulting and Clinical Psychology*, 59 (5), 715-723.
- Francis, G. M. (1991). Here come the puppies: The power of the human-animal bond. *Holistic Nursing Practice*, 5 (2), 38-41.
- Fredrickson, M., & DePrekel, M. (2004, March). Animal-assisted therapy for at-risk youth and families. In J. Serpell (Chair), *Can animals help humans heal? Animal-assisted interventions in adolescent mental health*. Conference held at the Center for the Interaction of Animals and Society, Philadelphia, PA.
- Friedmann, E., Katcher, A. H., Thomas, S. A., Lynch, J. J., & Messent, P. R. (1983).

- Social interaction and blood pressure: Influence of animal companions. *Journal of Nervous and Mental Disease*, 171 (8), 461-465.
- Granger, B. P., Kogan, L., Fitchett, J., & Helmer, K. (1998). A human-animal intervention team approach to animal-assisted therapy. *Anthrozoös*, 11 (3), 172-176.
- Hembree, E. A., Foa, E. B., Dorfman, N. M., Street, G. P., Kowalski, J., & Tu, X. (2003). Do patients drop out prematurely from exposure therapy for PTSD? *Journal of Traumatic Stress*, 16 (6), 555-562.
- Hensley, L. G. (2002). Treatment for survivors of rape: Issues and interventions. *Journal of Mental Health Counseling*, 24 (4), 331-348.
- Iannuzzi, D., & Rowan, A. N. (1991). Ethical issues in animal-assisted therapy programs. *Anthrozoös*, 4 (3), 154-163.
- Jaycox, L. H., Foa, E. B., & Morral, A. R. (1998). Influence of emotional engagement and habituation on exposure therapy for PTSD. *Journal of Consulting and Clinical Psychology*, 66, 185-192.
- Kessler, R. C., Sonnega, A., Bromet, E., Hughes, M., & Nelson, C. B. (1995). Posttraumatic stress disorder in the national comorbidity survey. *Archives of General Psychiatry*, 52, 1048-1060.
- Kruger, K. A., Trachtenberg, S. W., & Serpell, J. A. (2004, July). *Can animals help humans heal? Animal-assisted interventions in adolescent mental health*. Philadelphia, PA: Center for the Interaction of Animals and Society.
- Melson, G. F. (2004, March). Animals in the lives of adolescents: A biocentric perspective on development. In J. Serpell (Chair), *Can animals help humans heal? Animal-assisted interventions in adolescent mental health*. Conference held at the Center for the Interaction of Animals and Society, Philadelphia, PA.
- Messent, P. R. (1983). Social facilitation of contact with other people by pet dogs. In A. H. Katcher & A. M. Beck (Eds.), *New perspectives on our lives with companion animals* (pp. 37-46). Philadelphia: University of Pennsylvania.
- Odendaal, J. S. J. (2000). Animal-assisted therapy: Magic or medicine? *Journal of Psychosomatic Research*, 49, 275-280.
- Rape, Abuse, and Incest National Network (n.d.). *RAINN News*. Retrieved February 28, 2004 from <http://www.rainn.org/news.html>.
- Reichert, E. (1994). Play and animal-assisted therapy: A group treatment model for sexually abused girls ages 9-13. *Family Therapy*, 2 (1), 55-62.

- Resick, P. A., Nishith, P. W., Astin, T. L., & Feuer, M. C. (2002). A comparison of cognitive-processing therapy with prolonged exposure and a waiting condition for the treatment of chronic posttraumatic stress disorder in female rape victims. *Journal of Consulting and Clinical Psychology, 70* (4), 867-879.
- Resnick, H. S., Kilpatrick, D. G., Dansky, B. S., Saunders, B. E., & Best, C. L. (1993). Prevalence of civilian trauma and posttraumatic stress disorder in a representative national sample of women. *Journal of Consulting and Clinical Psychology, 61*, 984-991.
- Riggs, D. S. (2004, April). *Prolonged exposure as a treatment for post-traumatic stress disorder*. Workshop held at the Institute for Graduate Clinical Psychology, Widener University, Chester, PA.
- Rothbaum, B. O., Foa, E. B., Riggs, D. S., Murdock, T., & Walsh, W. (1992). A prospective examination of post-traumatic stress disorder in rape victims. *Journal of Traumatic Stress, 5* (3), 455-475.
- Sachs-Ericsson, N., Hansen, N. K., & Fitzgerald, S. (2002). Benefits of assistance dogs: A review. *Rehabilitation Psychology, 47* (3), 251-277.
- Schantz, P. M. (1990). Preventing potential health hazards incidental to the use of pets in therapy. *Antrozoös, 4* (1), 14-23.
- Serpell, J. A. (2000). Animal companions and human well-being: An historical exploration of the value of human-animal relationships. In A. H. Fine (Ed.), *Handbook on animal-assisted therapy: Theoretical foundations and guidelines for practice* (pp. 3-19). San Diego: U.S. Academic Press.
- Weinstein, E., & Rosen, E. (1988). Counseling victims of sexual assault. In E. Weinstein & E. Rosen (Eds.), *Sexuality counseling: Issues and implications* (pp. 201-223). Belmont, CA: Brooks/Cole Publishing.