

Employee Reactions and Adjustment to Euthanasia-Related Work: Identifying Turning-Point Events Through Retrospective Narratives

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This study used a retrospective narrative procedure to examine the critical events that influence reactions and adjustment to euthanasia-related work of 35 employees who have stayed in the animal care and welfare field for at least 2 years. The study analyzed adjustment trajectory graphs and interview notes to identify turning-point events that spurred either a positive or negative change in shelter workers' psychological well-being. Analysis of the identified turning-point events revealed 10 common event themes that have implications for a range of work, personnel, and organizational practices. The article discusses implications for shelter, employee, and animal welfare.

The Humane Society of the United States (HSUS) estimates that 6 to 8 million dogs and cats in the United States enter animal shelters each year and, depending on the region, one third to one half of them are euthanized (HSUS, 2003). Although some have medical or behavioral problems severe enough to preclude adoption, many of the animals euthanized are healthy, but unwanted. Typically, the job of performing euthanasia on society's unwanted animals falls in the hands of animal shelter workers, animal control officers, or other animal care professionals, creating what Arluke (1994) called a *caring-killing paradox*. That is, animal care professionals, such as shelter workers, are expected to euthanize companion animals for whom they have been providing care and protection. Consistent with this notion, Rollin (1986) argued that shelter workers are exposed to a type of stressor qualitatively different from the typical types of physical, task, and role-process stressors studied in the work stress literature—what he referred to as a *moral stressor*. As described by Rollin, shelter workers, most of whom enter the occupation because they want to help animals, are faced with a daily contradiction between their ideal occupational selves (i.e., protectors of animals) and the reality of having to kill healthy, but unwanted, animals.

Although awareness of the potentially disturbing psychological ramifications of euthanasia-related work has been evident within the sheltering field for at least the last 20 years (e.g., Rollin, 1986; B. H. Smith, 1984), there has been little systematic investigation of this population. Nonetheless, the small number of qualitative investigations conducted to date (Arluke, 1994; Arluke & Sanders, 1996; Fogle & Abrahamson, 1990; Frommer & Arluke, 1999; Hart & Mader, 1995; Owens, Davis, & Smith, 1981) and occasional media reports ("At Area Animal Shelters," 2002; "Shelter Workers," 2000) provide reason to believe that thousands of people charged with performing animal euthanasia in the United States are an at-risk population. Indeed, they are at risk for a variety of psychological, emotional, and physical ailments such as high blood pressure, ulcers, unresolved grief, depression, substance abuse, and suicide. The purpose of this study is to extend our understanding of the impact of euthanasia-related work on the psychological health and well-being of animal care professionals. In addition, given that organizational research shows employee health and well-being significantly influences organizational effectiveness

(Cartwright & Cooper, 1996; Cummings, 1990; Kreps, 1990), this study has implications for the welfare of animals served by shelters or other related agencies.

PRIOR EMPIRICAL RESEARCH ON EUTHANASIA-RELATED STRESS ISSUES

Relatively few studies have directly investigated influences on euthanasia-related stress. Nonetheless, these studies have provided suggestive evidence for a variety of factors that could increase or decrease the stress felt by animal care professionals involved in euthanasia. Sanders (1995) found that veterinarians reported fewer emotional difficulties euthanizing animals they had not seen before and to whom they had no attachment. If, however, they were familiar with the animal and knew the animal's behavioral tendencies, they tended to create an animal "personhood" that subsequently increased the emotional difficulties the veterinarians experienced. Likewise, shelter workers interviewed by Arluke (1994) and Arluke and Sanders (1996) reported experiencing deep emotional reactions to losing one of their favorite shelter animals, suggesting that the degree of attachment to the animal may be an important antecedent of euthanasia-related stress.

It also has been suggested that the reason for performing euthanasia may affect the degree of distress experienced by shelter workers and veterinarians. Shelter workers report feeling less distressed when animals were euthanized due to failing health than when healthy, adoptable animals were euthanized because they had to make room for new surrendered animals (Arluke, 1994; White & Shawhan, 1996). Similarly, veterinarians indicated experiencing less distress when euthanasia is performed on sick or injured animals than on healthier animals (Sanders, 1995). White and Shawhan (1996) found associations between the degree of worker distress and the number of animals euthanized in 1 day as well as the amount of apparent emotional or physical suffering of the animal (due to the euthanasia process). This suggests that the euthanasia process, facilities, and method used may have an important effect on worker well-being.

Understanding how shelter workers attempt to cope with euthanasia-related stress has received only scant attention. Hart and Mader (1995) asked humane society employees and veterinarians to describe their behavioral pretenses and concealed feelings about their involvement in animal euthanasia. Although staff members often pretended to be strong, happy, aloof, or emotionally untouched, they described their true feelings as angry, guilty, sad, and disgusted. Arluke (1994) reported a qualitative analysis of ways in which shelter workers manage their emotional response to euthanasia. A common method was decreasing or limiting emotional attachment to the animals. Some workers viewed the shelter as a "rest area" where animals would stay until their time was through. Another com-

mon way to manage emotions was to engage in cognitive reappraisal. That is, they would direct anger and frustration toward the public's lack of responsibility for their animals and unwillingness to reduce animal overpopulation. This helped workers to see their actions as caused by society's negligence rather than as a lack of their own compassion and caring. Indeed, workers often would construct a cognitive appraisal of the situation in which they viewed euthanasia of the shelter animals as better than risking the animal to neglect, abuse, or abandonment.

Reeve, Rogelberg, Spitzmüller, and DiGiacomo (in press) recently provided a quantitative confirmation of prior qualitative studies (e.g., Arluke, 1994; Arluke & Sanders, 1996) that suggest animal euthanasia is a significant work stressor for animal shelter employees. Reeve et al.'s (in press) results show that self-reported perceptions of euthanasia-related strain were prevalent among shelter employees. Furthermore, among a group of people who worked in the same general sheltering environment, these results showed a clear pattern of differences in stress and well-being between those who were directly involved with euthanasia and those who were not directly involved. Most notably, those directly involved in euthanasia reported significantly higher levels of work stress, stress-related somatic complaints, work-to-family conflict, and lower levels of satisfaction with the work they actually do. Likewise, among those who were engaged in euthanasia, the results demonstrated that perceived euthanasia-related strain was correlated significantly with a number of well-being-related outcomes. This association was independent of the effects due to generalized work stress. Taken as a whole, Reeve et al.'s results indicate that among those individuals for whom conducting animal euthanasia is part of their job, it is a salient, unique source of work stress, which has a negative impact on their well-being.

Reeve et al. (in press) also showed that there was variability in the degree of perceived euthanasia-related strain and well-being indexes among employees involved in euthanasia activities. This suggests that not all employees are affected by euthanasia involvement to the same extent; some employees were able to adjust to euthanasia-related work more effectively than were others. Findings such as these make salient the need for additional research that focuses on understanding factors both internal and external to the individual that explain this variation. Examples of internal factors include individual differences in personality and stress resiliency. Examples of external factors include social support, management behaviors, and workload. This study focuses on gaining a better understanding of the external factors. Specifically, we examine key events and conditions that influence animal care professionals' psychological adjustment to euthanasia-related work.

THE CURRENT STUDY

The empirical literature from industrial-organizational psychology provides a firm basis for suspecting that differences in a variety of workplace practices and organi-

zational factors (e.g., job design, managerial behaviors, employee training, recruitment and socialization practices, employee health-care programs) can have significant impact on employees (Anderson, Ones, Sinangil, & Viswesvaran, 2001). Substantial research suggests that managers' task-oriented and people-oriented behaviors have a significant impact on employee morale, job satisfaction, performance, adjustment, and turnover (Yukl & Van Fleet, 1992). More recently, organizational and health researchers have shown that in addition to conditions that result in constant or chronic stress, random environmental shocks can have important influences on a variety of employee health and well-being outcomes (e.g., Druckman, 2001; Golish, 2000; Graber & Brooks-Gunn, 1996; Holladay et al., 1998; Lee & Mitchell, 1994; Roenkae, Oravala, & Pulkkinen, 2002).

For example, a study of turnover employing a shock-based model was able to account for 92.6% of the decisions to quit (Lee, Mitchell, Holtom, McDaniel, & Hill, 1999). These shocks are conceived as major, identifiable events that can ignite cognitive and emotional processes. Whether these shocks lead to significant changes in employee health and well-being is a function of the nature of the events themselves, as well as conditions, culture, and other more stable factors of the work environment.

As such, the goal of this study is to identify *turning-point events*, particularly stressful or particularly positive events that spur changes in employees' attitudes, cognitions, and perceived stress regarding euthanasia-related work. This implies two distinct differences from prior research on euthanasia-related work as well as the more general work-stress literature. First, the turning points analysis is, by definition, an event-based analysis. Existing taxonomies of work stressors are more global in nature. This event-based approach recognizes that, for example, although coworker relations may be good on average, a particularly negative or positive isolated event can significantly affect one's intent to quit, satisfaction, or stress level. Second, we are interested in event-consequence dyads beyond just antecedents of stress. Existing research on stress antecedents typically does not focus on things that improve adjustment. Our turning-points analysis is focused equally on both downturns and upturns.

METHOD

Sample

Data were collected at the 2002 Animal Care Expo held in Miami Beach, Florida. The Animal Care Expo is the largest annual meeting of animal care and control professionals and volunteers in the world, attended by a diverse group of people who have an interest in the humane sheltering, care, control, rescue, and protection of domestic and wild animals (HSUS, 2001, p. 6). Expo attendees were informed about the study during the introductory plenary session (purpose, anonymity). No direct incentive or remuneration was provided to participants.

Conference attendees interested in participating in the study were screened for current involvement with animal euthanasia. A total of 38 attendees were interviewed. Most were female (78%). Slightly over half ($n = 22$, 58%) worked at a humane society, 7 interviewees worked as animal control officers, 2 worked in veterinary services, and 7 worked in other animal care capacities but still were involved in euthanasia. Just over half (58%) were in supervisory or director positions. Average tenure in the animal care field was 10.55 years ($SD = 9.19$) and averaged 8.97 years of euthanasia experience ($SD = 8.23$); however, the range for both variables was large (tenure range = 1 to 35 years; euthanasia experience = 1 to 30 years). As the focus of this study is the events that influence adjustment to euthanasia over time, 3 of the 38 respondents with less than 2 years of experience were excluded.

Discussions with shelter managers and other animal-sheltering professionals suggested that the highest degree of turnover occurs within the first year of experience. Thus, 2 years of experience seems reasonable as a cutoff to distinguish those who “survived” at least the initial confrontation with euthanasia from those who did not. Analysis of the interviews from the 3 individuals dropped did not suggest qualitatively different response but, rather, limited opportunity to have experienced any significant events.

Procedures

This study employs a retrospective narrative methodology to elicit autobiographical narratives that are longitudinal in nature. That is, we essentially asked participants to talk us through their adjustment (thoughts, feelings, and behaviors) to euthanasia over time, starting at their first day on the job and progressing to the present day. Although retrospective recall studies are not common in the organizational literature, this method has been used with success for studies of health-related behavior: cigarette smoking (Means, Swan, Jobe, & Esposito, 1994); dietary habits (T. W. Smith & Jobe, 1994); and affect and emotions (Benner, 1984; Salovey, Sieber, Jobe, & Willis, 1994). Thorbjörnsson, Michelsen, and Kilbom (1999) demonstrated that this method could be used to collect reliable and accurate data concerning employees' psychosocial work conditions as far back as 24 years prior to the date of the interview. Additionally, this research showed that emotionally charged events were recalled particularly well and could even be used as an anchor to enhance the accuracy and reliability of recalled information for other work events and conditions.

The specific semistructured interview format used was adapted from the narrative picturing technique (Stuhlmiller & Thorsen, 1997) and time-ruler method (Thorbjörnsson et al., 1999) used in prior studies. The content was developed based on discussions with subject-matter experts, prior research findings regard-

ing euthanasia-related stress and general work issues for this population (Reeve et al., in press), and pilot testing with humane society employees.

Because our primary purpose was to discover inductively the specific turning-point events that influence adjustment to euthanasia-related work as experienced by the individuals, we purposely designed the interviews so that the exact meaning of the primary dependent variable (adjustment) could be interpreted by the respondents in a way that best reflected their ideas of adjustment. Following the tenets of grounded theory (Glaser, 1978, 1992; Strauss & Corbin, 1990, 1998), we wanted to understand the individualized experiences of animal care professionals from their own point of view. We did not want to ask them to fit their experiences into a schema imposed by us, nor were we attempting to gain a quantitative assessment of the magnitude of their stress. This design feature has several advantages. First, by leaving the exact definition of adjustment open to interpretation, responses were less likely to be tainted by demand characteristics, as sometimes is a concern with more structured questions. Second, this gave respondents the freedom to construct a retrospective report centered on the affective, cognitive, or behavioral aspect of psychological reactions and adjustment most meaningful to them. Consistent with aims of grounded theory, the reports are more likely to reflect the participants' realities. Furthermore, this design enables us to obtain preliminary information on a wider array of event-consequence dyads than if we had required all participants to focus on a single aspect of adjustment.

To ensure participants felt comfortable reporting on this information, interviews were conducted in private meeting areas in the conference hotel. To explain the retrospective narrative task, we told participants to think of us as newspaper reporters interested in capturing "your personal story of your adjustment to this euthanasia-related work." Participants were told that we were interested specifically in changes in their psychological adjustment to their work and the causes of those changes. Participants were instructed to consider the idea of trying to think about their adjustment as a trajectory line, beginning with their first day on the job up to the present day. To facilitate this, the interviewer showed participants example trajectory graphs, explaining that the horizontal axis reflected time (the origin being their first day on the job and the endpoint being the current day) and that the vertical axis reflected adjustment, ranging from extremely negative to extremely positive. Participants were shown five example graphs that reflected a variety of overall trajectories (no change, trend upward, trend downward) as well as volatility (smooth line, line with extreme ups and downs, line with many minor changes). Pilot tests and experience in conducting the actual interviews indicated that the participants readily understood this task and it seemed to make intuitive sense to them.

After participants drew their own graphs, the interview focused on interpreting the graphs. Participants were asked specifically to provide interpretation and specific details regarding (a) the overall nature of the graph and how it reflected their

adjustment from a global perspective (this was primarily to ensure that participants' graphs reflected adjustment over time), and (b) the reasons for each directional change shown on the trajectory line (the turning points). Interviews were designed to be approximately 20 min in length; actual interviews lasted between 15 and 80 min.

ANALYSES AND RESULTS

Prior to examining the specific turning points, we evaluated the overall trajectories drawn by the participants. In doing so, we identified a broad distinction between trajectories based on overall slope of the adjustment line. Most trajectories had multiple fluctuations, but a general gain or decline could be identified across the span of the entire graph. Many of the trajectories (45.7%) had an overall positive slope (see Figure 1), although there was substantial variability among this broad type. That many of the graphs drawn by the participants showed general improvement over time is not unexpected, given that our sample could be considered, relatively speaking, as "survivors" who remained on the job for at least 2 years.

In a like manner, only a few trajectories (5.7%) showed overall decelerating slopes (see Figure 2), indicating a deterioration of adjustment over time. Last, about a third of trajectories (34.2%) failed to show discernible or consistent trends

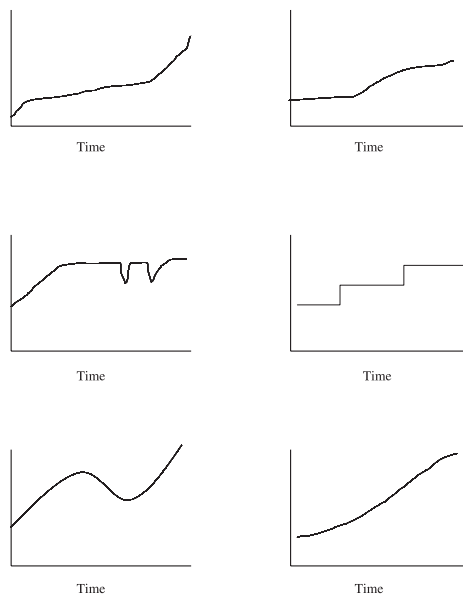


FIGURE 1 Six examples of adjustment trajectories with increasing trends.

FIGURE 2 Two examples of adjustment trajectories with decelerating trends.

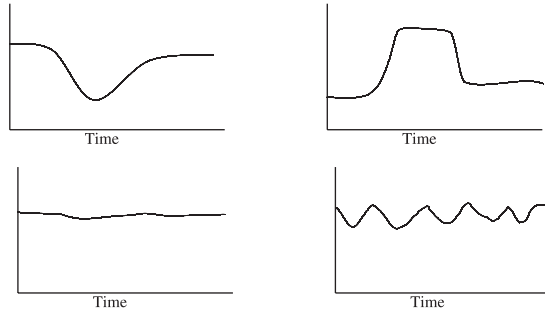
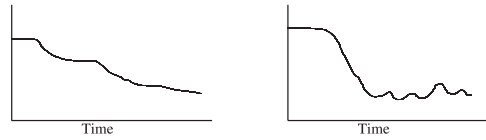


FIGURE 3 Four examples of adjustment trajectories with mixed or no trends.

across the course of the participant's career; however, there was substantial variability among this group (see Figure 3).

Two results of the global analysis of the trajectories are particularly noteworthy: Although many of the participants indicated gradual improvement, there is substantial variability in the adjustment trajectories, and most of the graphs show distinct turning points. The former result indicates that although many people may show a general degree of adjustment, clearly there is substantial variability in the amount, rate, and stability of their adjustment. The latter result corresponds to the primary thesis of this article. Understanding how people come to adjust (or fail to adjust) to their jobs requires an event-based perspective. Thus, we proceeded with the analysis of turning points.

To identify events that resulted in significant changes in employees' adjustment, three raters reviewed the graphs and interview transcripts. Raters recorded as many turning points as they could identify. To qualify as a turning point for our analyses, five criteria had to be met:

1. An identifiable event, a specific happenstance, or issue that arose during a relatively short period of time (e.g., "My boss yelled at me." "A dog bit me." "The shelter's budget was cut in half.").
2. An event specifically linked to an identifiable change in attitudes, stress, or well-being.
3. A change that appeared to be more than a minor or daily fluctuation.
4. An event that reasonably could be seen as the antecedent of the change. For example, given the phrase, "my attitude changed so I began to feel better,"

the change in attitude would not be considered an event, as it is an outcome itself likely spurred by some other event.

5. At least two of the three raters were in agreement that the candidate event satisfied the first four criteria.

Eighty-three turning points that fit the five criteria were identified. These events were evaluated to identify common themes. To do this, two of the authors read the list of events and created an initial list of 10 themes that appeared to describe the 83 events. Three independent raters, individuals not involved in the interviews or the first round of transcript coding, sorted the list of events into the themes. They were instructed to place an event in an unidentified/miscellaneous category if it did not appear to fit any of the given themes. Results of this coding process revealed that the 10 themes adequately portray the nature of the events and that events could be classified with an acceptable level of interrater reliability. At least two of the three raters placed 81.9% (68) of the 83 events in the same theme; of these, 53 were coded with unanimous agreement. Looking at all 249 ratings (83 events \times 3 raters), 77% of the ratings were the same. Overall, this was taken as evidence of reliability. Evaluation of the remaining 15 events that were unclassified did not reveal additional themes.

To gain a sense of the commonality of each theme, we computed two indexes. First, based on the sorting results described earlier, we calculated the percentage of people (out of 35) for whom a turning-point event of each type was identified. This first index is a very conservative estimate because a person was counted only if (a) at least two of three coders classified the verbalization as satisfying all four turning-point criteria (see earlier), and (b) at least two of three event raters sorted the identified event into the same theme. Thus, in addition to this conservative estimate based on identifiable events, we also calculated an index of mentions. That is, to gain an admittedly liberal sense of the commonality of each event theme, two of the authors coded interviews for any type of verbalization relating to each theme: An interviewee was counted only if both raters agreed. We believe these dual approaches complement each other and, when used in combination, provide more insight than could either individually.

The 10 themes, with descriptions and example events, are shown in Table 1. As shown, the types of events that potentially can have significant impact on the adjustment trajectories, events that can be considered turning points, are varied in nature. Of the 10 themes, 3 typically related to significant upturns, 6 to significant downturns, and 1 (interactions with management) led to both upturns and downturns.

Personally conducting euthanasia for the first time was identified as a significant turning-point event for 20% of the participants; 25.7% of the participants at least mentioned their first euthanasia experience as a significant memory. In all cases, this was associated with a downturn in their adjustment trajectory. In gen-

TABLE 1
Taxonomy of Adjustment-Related Turning-Point Events

<i>Event Theme</i>	<i>Description</i>	<i>Consequence</i>	<i>Example Events</i>
1. First euthanasia experience	Personally conducting euthanasia for the first time.	Downturn	“I was exposed to euthanasia within my first 2 weeks. I freaked out. It was totally unacceptable to me at first; I had a hard time with the concept of killing perfectly fine animals.”
2. Difficult euthanasia	Particularly difficult euthanasia; includes cases of extreme animal suffering, animal retaliation, and personal injury as well as cases that are psychologically difficult due to the reason for euthanasia or a bond with a particular animal	Downturn	He had to put to sleep an adult dog to which he had become very attached and with whom he developed a good rapport. ^a A dog that she was euthanizing (not wearing a muzzle because not enough were available) bit her friend, severely wounding her leg. ^a
3. Influx of animals	Substantial increase in number of animals taken in by shelter in a relatively short period of time that results in overcrowding and increase in rate/numbers/frequency of euthanasia; often due to seasonal influx of puppies and kittens.	Downturn	Following a mass confiscation of animals from an illegal facility, judge made the decision to place 90% of them in the shelter, thus forcing shelter to euthanize all of the other animals at the facility. ^a
4. Euthanasia of healthy animals	Euthanasia of healthy, adoptable animals (i.e., those that have no medical or temperament problems) due solely to overcrowding (i.e., lack of space).	Downturn	Making the decision to euthanize for space reasons is really hard on her; euthanizing for behavioral or medical reasons is not that difficult because she can justify doing it. ^a
5. Interactions with management	Positive or negative interactions with management or supervisors regarding how work is conducted, shelter policies, euthanasia decisions, and so on.	Both depending on nature of interaction	“The board members didn’t like me; they started a negative media campaign on me—said bad things about me. The local newspaper called me a ‘slaughterer’ ... [this] was critical in my downturn. You are so vulnerable to attack.”

(continued)

TABLE 1 (Continued)

<i>Event Theme</i>	<i>Description</i>	<i>Consequence</i>	<i>Example Events</i>
6. Euthanasia technical training	Receiving formal technical training designed to increase technical skill and knowledge of euthanasia procedures.	Upturn	“Learning and education on the issue really helped me. I began to realize that I was providing a way out of pain for many animals.”
7. Reduced number of animals euthanized at a shelter	Events that reduce the total numbers of animals that have to be euthanized at shelter (regardless of whether the individual’s involvement changes).	Upturn	“Educating the public has been successful; we see much fewer puppies coming in. ... A lot more owners are having their pets spayed or neutered.”
8. Reduced amount of euthanasia for individual	Events that lead directly to a reduction in the amount the individual has to euthanize (not due to reduction in shelter euthanasia rates).	Upturn	“I moved into a supervisory role and now I don’t do euthanasia very often.” “Rotating responsibilities [among employees] helps a lot.”
9. Improved euthanasia method	Changing method of euthanasia or procedures to reduce animal suffering.	Upturn	“I learned about Fatal-Plus—the animal is gone in less than 10 seconds without any vocalization. This made it much easier emotionally.”
10. Coping enhancements	Events that directly assist with and increase coping behavior or cognitions, including social support, therapy and medication.	Upturn	“[That] workshop was extremely helpful, particularly the compassion fatigue part of it. That was one of the steps upward.”

^aText from interviewer’s notes of interviewee response; not a direct quote from interviewee.

eral, evaluation of our interview notes suggests the effect of this event type appears to stem from the following:

1. General lack of understanding of the extent to which euthanasia is performed.
2. Anxiety over technical inexperience.
3. Unrealistic expectations of the magnitude of the psychological impact of performing euthanasia.
4. General inexperience with how to cope with the psychological aftermath.

Particularly difficult euthanasia cases were identified as emotionally charged events that had a substantial negative effect on adjustment for 25.7% of the sample. Included in this theme are cases in which animals appeared to suffer or retaliate and psychologically difficult cases (e.g., euthanizing an animal with whom the employee had developed a strong bond or euthanizing a litter of “cute” puppies). Forty percent of the participants made some mention of physically or psychologically difficult cases.

It should be noted that the participants’ discussion of these events suggested that an organization’s or individual’s response to a bad experience potentially could have a positive effect in the long term. An employee who suffered a severe bite while trying to euthanize a dog reported it as a significant negative turning point. However, the employee noted that the shelter responded by purchasing muzzles for aggressive dogs and generally improving euthanasia procedures. Thus, in the end, this negative event resulted in a positive response. Similarly, a woman reported that witnessing a technically deficient attempt at euthanasia had severe negative emotional consequences for her—seeing the animal suffer. However, she explained that this event inspired her to seek out additional technical training to increase her own technical competence. Furthermore, although her graph indicated an immediate negative impact on her emotional adjustment, she commented, “I realized at that moment that there was a difference between ‘killing’ and ‘euthanasia,’” suggesting an eventual positive effect on her cognitive adjustment.

A relatively significant influx of animals was reported as a turning-point event for 11.4% of those interviewed. Typically, the participants reported a substantial increase in the number of animals taken in by the organization in a relatively short period, which resulted in overcrowding and an increase in frequency or amount of euthanasia necessary. Often, this appeared to be associated with seasonal influxes of puppies and kittens in the spring, but other more specific events were reported (e.g., mass confiscation). Only people who clearly identified it as an event mentioned this.

The euthanasia of healthy, adoptable animals with no medical or temperament problems, solely because of overcrowding (lack of space), was a significant turn-

ing point identified by 17.1% of the sample. About one third of the participants (34.3%) made some mention of this issue. For example, in explaining why her adjustment trajectory was higher now than in the past, one person stated, “I raised more money and doubled our space so we don’t euthanize so many animals; we haven’t killed animals for space reasons in a long time.”

Turning-point events relating to interactions with management were identified for 8.6% of the sample; however, 45% mentioned the perception of interactions with management as having a positive or negative influence in some way. A closer evaluation of the reported management-related events revealed a distinction corresponding to the common two-factor model of leadership behaviors identified by industrial-organizational psychologists (e.g., Schriesheim and Stogdill, 1975): initiating structure behaviors and consideration-oriented behaviors. Examples of initiating structure behaviors from our interviews include the following:

1. A shelter director who allegedly spent a substantial proportion of the annual operating budget on non-shelter-related expenses (negative event).
2. A new supervisor who obtained grants and large private donations to fund and improve the shelter (positive event).
3. A supervisor who implemented a job rotation program to spread out the euthanasia duties (positive event).

Consideration-oriented leadership behaviors were reflected in the following events:

1. A manager who took extra time to listen to an employee discuss grief over euthanizing a dog (positive).
2. Managers who ignored input of employees (negative).
3. A manager who criticized an employee in front of others (negative).

Empirical literature from industrial-organizational psychology indicates managers have a significant effect on employee morale, job satisfaction, performance, adjustment, and turnover (Yukl & Van Fleet, 1992). Consistent with this, current results suggest that management behaviors, in terms of initiating structure-type behavior—securing necessary resources, designing work processes—and the more interpersonal consideration-oriented behavior—communicating with employees, giving employees a voice—can have a significant effect on how well employees are adjusting to euthanasia-related work.

The importance of technical training programs designed to increase technical skill and knowledge of euthanasia procedures was made evident as 25.7% of the participants identified training as a key event that led to an increase in adjustment. Over half the sample (57.1%) mentioned training as an important issue.

Of the sample, 20.0% reported—22.6% mentioned—a turning-point event: a significant reduction in the total numbers of animals to be euthanized at the shelter. This was regardless of whether the individual's involvement changed. Likely due to two reasons, this type of event always corresponded to increases in the adjustment trajectories:

1. Participants suggested a direct effect because of having to perform euthanasia less often or on fewer animals.
2. Participants' comments indicated an indirect positive effect of, as one person put it, "feeling like things are improving."

Events that led directly to a reduction in the individual participant's euthanasia-related duties were reported (no mentions) by 20.0% of the participants. This is distinct from the previous event theme in that the reasons for reduced involvement in euthanasia were not related to any reduction in total numbers euthanized. For example, two participants moved into supervisory roles that required them personally to perform less euthanasia, even though there was no change overall in the number of animals being euthanized by the shelter.

Implementation of an improved euthanasia method or process was noted as a turning-point event by 14.3% of the participants (20.0% mentioned). Typically, participants indicated this was associated with increased adjustment because of the perception that the newer method reduced animal suffering and effected a more humane death.

Experiencing events that enhanced coping behaviors or cognitions (e.g., starting therapy, taking medications) was reported by 17.1% of the participants. Ten participants (28.6%) mentioned the general issue of receiving support (e.g., social support from friends and family) as critical in coping and adjustment.

DISCUSSION

The results of this study, combined with prior research, are informative for those seeking to understand and facilitate animal care professionals' adjustment to euthanasia-related work. This study identified a number of turning-point events that implicate a variety of workplace and organizational issues, including job design (e.g., how euthanasia was conducted, work schedules); organizational resources (e.g., funding, holding capacities); organizational practices (e.g., adoption programs, euthanasia policies, intake policies); managerial behaviors, employee training, recruitment, and/or socialization practices (e.g., preparing employees for reality of euthanasia experience); and employee health-care programs (e.g., stress-management training).

On the positive side, this suggests that there are multiple ways to help employees adjust; the downside to this is that there are multiple work and organizational

processes that can become negative turning points. Either way, this suggests that when considering issues of adjustment to euthanasia-related work, organizations should pay attention to factors beyond just how many animals are being euthanized and the particular method being used.

For example, the existence of the first euthanasia experience as a significant negative turning point may indicate the need for better recruitment and early socialization practices in addition to increased and earlier training. A number of respondents noted that they had unrealistic expectations regarding work activities early in their careers. This appeared to manifest as both unrealistically high and low expectations. One person came in thinking, "I can save them all." Another started the job assuming "Euthanasia won't bother me." Research on newcomer expectations and realistic job previews suggests that by calibrating expectations at organizational entry, newcomers can better handle the difficulties that may arise on a job (Fedor, Buckley, & Davis, 1997; Wanous, 1989). Thus, employing high-fidelity, realistic job previews or work samples in this context might help negate the initial shock that many respondents reported soon after starting the job. Furthermore, research suggests that formal socialization processes, such as realistic job previews, appear to positively influence subsequent employee attitudes and behaviors toward the organization (Allen & Meyer, 1990; Meyer & Allen, 1988). A few respondents mentioned that their employers already have begun to provide some type of job preview.

Technical Skills and Training

The development of technical skills and competence through formal euthanasia training, certification programs, or direct practice appears to be a key intervention. Although technical training has obvious merits that warrant its recommendation, this study suggests that such training may have additional benefits: increasing worker attitudes and cognitions toward euthanasia and decreasing the likelihood of particularly negative emotional events. For example, a participant stated that viewing euthanasia as a more humane option was a result of training. Evaluation of the interviews suggests that the key issues behind the first euthanasia experience event type are lack of technical skill, lack of self-confidence, and a generalized sense of "not really understanding what it meant to euthanize an animal even though I had been told many times." A number of respondents commented about a general lack of understanding of the magnitude: "I just had no idea that the volume of animals coming in was going to be so high." A number of the respondents in this study also indicated that the degree of perceived animal suffering adversely affected their personal adjustment. "Difficult euthanasia sessions," which encompassed this issue, stood out as a key turning-point event in this analysis. Although technical training will not ensure the prohibition of difficult euthanasia sessions, workers with better training presumably are less

likely to encounter difficulties and may be better equipped to handle difficult situations when they do arise. Taken together, these perspectives suggest the value of training is to increase an employee's overall readiness, both in terms of technical competence and psychological preparedness, to perform euthanasia. One respondent commented, "I think it helps employees to possess knowledge of what and why they are doing euthanasia. For example, realizing that the animals are not in pain." Given the apparently substantial, positive impact on adjustment, it seems prudent to recommend that technical training be implemented as early as possible in an employee's career.

Proactive Programs

A broader evaluation of the interviews also suggests that proactive programs or activities aimed at reducing both the immediate and long-term necessity of euthanasia may be especially effective. Almost all interviewees referred to the positive psychological aspects of those activities they viewed as "proactive." Examples include active public awareness campaigns, behavioral enrichment and socialization for dogs, innovative adoption programs such as mobile adoption units, extensive spay and neuter assistance programs, and responsible pet ownership education programs. In particular, these types of activities are related to two key turning points that have opposite effects on adjustment: (a) euthanasia of healthy, adoptable animals, especially for space reasons; and (b) reduction in the number of animals euthanized by the organization. Programs or activities such as those noted are aimed at the following:

1. Directly reducing the number of animals surrendered: Spaying and neutering decreases the unwanted pet population.
2. Directly increasing the number of animals adopted, thereby reducing euthanasia of adoptable animals: Community outreach programs increase exposure of shelter animals.
3. Both of these: In-house behavior programs make animals more adoptable and reduce the likelihood of relinquishment.

In addition, the implementation of these types of programs is likely to have a direct effect on companion-animal welfare.

Our results in no way speak to the actual effectiveness of any of these shelter practices for their intended purposes; rather, our results refer only to the reported positive psychological benefits of such activities. In fact, a number of the respondents noted that such proactive programs have a direct psychological effect—regardless of the actual or immediate effectiveness—on their ability to cope. Programs they perceive as addressing root problems seem to provide immediate

psychological support. One participant volunteered that being able to be involved in promoting adoptions keeps “the bigger picture” in mind, that euthanasia is just part of the job, not “the job.” Reeve, Spitzmüller, Yanni, and Rogelberg (2001) reported a similar finding. Implementing proactive shelter policies was one of six main themes to emerge from their analysis of responses to the question “What does your shelter currently do, or could they do, that would help reduce euthanasia-related stress?”

Management also may want to be concerned about critical periods during which employees may be especially susceptible to negative ramifications of euthanasia-related work. From our analysis of adjustment trajectories, it seems clear that the negative turning-point events reflect the onset of these periods. After experiencing a significant negative turning-point event, employees very likely are more susceptible to the effects of a subsequent negative event. From a personal resources perspective, each stressful event taps or diminishes a person’s resources for coping with stress; thus, multiple events in close temporal proximity are likely to overwhelm the person. To combat this, organizations could, for example, release employees temporarily from euthanasia-related duties following a highly stressful event.

In terms of identifying more common or “standard” critical periods, the interviews lead us to believe that new, inexperienced employees generally are highly susceptible to euthanasia-related stress. Many of the people we interviewed made some mention of not being prepared on entry—cognitively, emotionally, or technically—for euthanasia. Second, compared to more tenured employees, new employees are unlikely to have a well-developed social support network that is prepared and able to offer support and understanding of their euthanasia-related work. Organizations might do well to assist with the development of social support networks for new employees, such as mentor programs, peer support groups, and subsidized counseling. Indeed, as reported in this study, almost a third of the participants mentioned the importance of social support in their coping and adjustment.

Implications for Animal Welfare

Industrial and organizational research clearly demonstrates that the health and effectiveness of any organization relates directly to the competence and well-being of its human resources (Anderson et al., 2001; Hendrix, Summers, Leap, & Steel, 1995). Employee performance is a fundamental aspect of an organization’s ability to execute its primary functions; thus, factors that influence employees’ ability and willingness to exhibit appropriate and effective behaviors ultimately will affect the organization’s efficacy. Such factors include competence, health, intrinsic motivations, emotional well-being, and satisfaction with supervisors. Likewise, these findings should be of additional import to shelter

management in that poor physical and affective well-being can influence an organization's effectiveness adversely by diverting organizational resources (Cummings, 1990; Kreps, 1990). Poor employee health leads to absenteeism (Johns, 2001; Martocchio & Harrison, 1993) and turnover (Chen & Spector, 1992; Hendrix, Ovalle, & Troxler, 1985; Wright & Cropanzano, 1998), which drains financial resources through increased medical expenses and increased human resource management expenses, including recruiting, selection, and training costs associated with high turnover rates. Similarly, lost work time because of increased sick leave and high turnover can decrease an organization's effectiveness, if skilled employees are not available and remaining employees become overloaded with work.

In addition, research from the animal welfare sciences has shown that employee attitudes and training can have substantial implications for organizational effectiveness and animal welfare in a variety of settings. Coleman, McGregor, Hemsworth, Boyce, and Dowling (2003) recently showed that the negative attitude of stock handlers was associated with aversive interactions with pigs and the use of electric prods. Consistent with other studies showing that employee training programs, targeting attitudes, and behavior affect animal welfare (Hemsworth, 2003), Coleman et al.'s (2003) results suggest that understanding and improving employee attitudes and behaviors could be an important way to enhance the welfare of animals who come into contact with humans in employment settings.

Taken together, these two research domains suggest that we should think of shelter health and effectiveness, employee health and well-being, and animal welfare as pieces of an interrelated system (Figure 4). As such, this study has both direct and indirect implications for animal welfare. Our results revealed that a variety of organizational issues such as training, job design, and supervisor behaviors have important implications for shelter workers' adjustment to euthanasia-related work. Consistent with Grandin (1980, 1982, 1992, 1998, 2000, 2003), who showed that organizational decisions about job design and human resource policies can substantially influence animal welfare in the beef and pork industries,

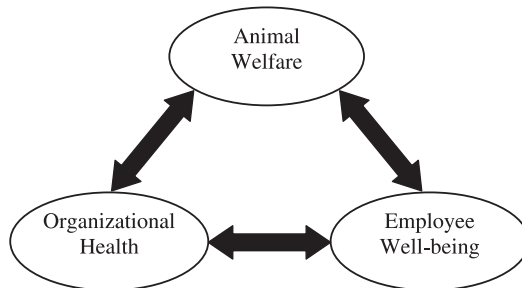


FIGURE 4 Interrelation among organizational health, employee well-being, and animal welfare.

our results suggest a better understanding of the workplace factors that influence shelter workers' well-being may enhance shelter-animal welfare as well.

Likewise, a better understanding of the types of skills required for effective performance of animal care professionals ultimately could affect animal welfare. Irvine (2002) noted that many shelter workers spend substantial time interacting with the public in the execution of shelter operations—adoption, relinquishment, licensing, humane education—and suggested that these interactions provide a window of opportunity to educate people about animal behavior and care. Without the skills and psychological resources required for effective social interactions, such opportunities are likely to go unrealized, to the detriment of animal welfare. Similarly, these results suggest that training in euthanasia technical skills could have a positive impact not only on employee competence and well-being, but also on animal welfare (e.g., reduced potential for technical errors during euthanasia).

Limitations and Caveats

Although we believe this study is informative, it is important to recognize that no one research methodology should be relied on to reveal the whole truth. Retrospective recall is no exception; it is susceptible to a number of limitations and threats to validity. Most notable is the issue of memory accuracy and biases (Magnusson & Bergman, 1990). Stone, Catania, and Binson (1999) noted that when using a retrospective methodology, people are likely to underreport cognitive coping and overreport behavioral coping. Although we did not specifically examine coping behaviors, this issue is equally applicable to our study; people's reflections of self-behaviors and cognitions can be biased or completely forgotten. Because we wanted to ensure that the recall narratives reflected the respondents' unique concerns, the interviews did not prompt for reports of specific factors, events, or outcomes. Thus, respondents may have omitted some events because of memory lapses rather than the relative importance of the event.

Similarly, the over- or underestimation of the psychological reality of an event is well documented in studies of pain (Linton & Melin, 1982; Norvell, Gaston-Johansson, & Fridh, 1987; Salovey et al., 1994). It is thought to be driven by the influence of mood and emotion on the processing of information, leading to effects such as state-dependent memory, mood-congruent recall, and "depressive self-focusing" (Bower, 1981; Salovey, 1992; T. W. Smith, Ingram, & Roth, 1985; Ucross, 1989). Linton and Götestam (1983) compared immediate reports of pain intensity with retrospective reports of pain intensity for the same event. Results showed that respondents, on average, tended to exaggerate the intensity of the pain in retrospective reports compared to their own descriptions at the time of the event. Such biases clearly would be of concern for this study as they could bias the magnitude of the effect of a specific event; however, it should be kept in mind that our purpose was not to assess the magnitude of the effect of any specific event per se.

Third, our study is based on “survivors.” Thus, one should be careful in generalizing the findings. Because we chose to focus on those who remained in the job for at least 2 years, our data do not reflect the issues or factors that act as turning points for those who leave the job relatively quickly. It is possible that nonsurvivors experience qualitatively different types of turning points than do survivors. It also is possible that nonsurvivors react to the same turning-point events differently from survivors. Our data do not address these types of questions. Similarly, the range of tenure of the participants was broad. Clearly, the retrospective reports of someone’s career are likely to change, depending on whether the individual is reporting across a 1-year period versus a 35-year period. A specific event may be more prevalent than reported here simply because it is not reasonable to expect that a person will recall accurately each individual significant event that occurred across a 35-year time span in the course of a 30-min interview. Likewise, a person with only 2 years’ tenure is likely to report relatively more minor events simply because of the lack of comparisons. Again, this suggests caution in making inferences regarding the prevalence of the turning points.

It also should be recognized that specific events do not explain all the variation in the adjustment trajectories. Reading the transcripts of the interviews, we found a number of people who discussed what essentially is the concept of habituation. That is, some participants drew adjustment trajectories with smooth positive slopes. This habituation seems to relate both to the emotional response and to a cognitive response. One woman commented that over time she “just got used to the bad feelings.” At the same time, a number commented on cognitive habituation, the idea that experience leads to an increased acceptance of the necessity of euthanasia. One woman, who drew a smooth upswing in her trajectory after the 6-month mark, stated, “I began to realize that euthanasia was something that we had to do. I began to realize that I was providing a way out of pain for many animals.”

CONCLUSIONS

Given the magnitude of the pet overpopulation problem, limitations on governmental and private funding for the creation of shelter facilities, and the persistence of pet abandonment and relinquishment, the need for performing euthanasia is unlikely to decrease in the near future. Applied social scientists need to address the dearth of substantive empirical research aimed toward understanding and helping individuals and shelter management deal with euthanasia-related work. Although much more work is needed, this study provides a “meaningful guide to action” (Strauss & Corbin, 1998, p. 12) for both researchers and management. Specifically, we believe the focus on turning-point events is best suited for developing testable hypotheses for quantitative researchers using more controlled, longitudinal designs. Likewise, we believe the identified turning points

are useful for making educated, although preliminary, recommendations for management to act in a proactive fashion. It is clear that adjustment to euthanasia-related work is difficult; many do not adjust well. However, this study shows that poor adjustment is not inevitable; things can change for the better.

Although future research should examine individual differences in susceptibility or resiliency to stress, the focus on turning-point events is particularly valuable for both organizational researchers interested in workplace factors that affect all workers and shelter management interested in actionable results. That is, the identification of critical events that stand out as landmarks in the minds of animal care professionals that either hinder or enhance their psychological adjustment to euthanasia-related work provides guideposts for both researchers and managers. It is important to recognize that merely staying in this occupation is not a proxy for healthy adjustment; despite suffering from negative well-being and health problems, some—out of an extreme compassion for animals—continue to perform euthanasia-related work. A woman who had been in the field for 23 years perhaps best typified this. She commented numerous times during the interview that she “felt like quitting” almost everyday. When prompted with the question about why she did not quit, she responded, “Why didn’t I walk away? I didn’t walk away because doing so wouldn’t help stem the flow. Staying meant loving animals. I couldn’t leave them.”

ACKNOWLEDGMENTS

Charlie L. Reeve is now at the Department of Psychology, University of North Carolina at Charlotte.

The research described here was supported with funding from The Humane Society of The United States. Special thanks to Natalie DiGiacomo for her assistance with this project.

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