Play and Pets: The Physical and Emotional Impact of Child-Life and Pet Therapy on Hospitalized Children

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Child-life therapy programs and pet-therapy programs are often used in pediatric hospital settings to provide emotional support and diversion; however there is little research about their efficacy. How play and pet therapy affect children was examined in this study of 70 hospitalized children. Self-reported mood, displayed affect, amount of touch, heart rate, blood pressure, and salivary cortisol were measured. Children and parents viewed both therapies as mood enhancing experiences for the child. Heart rates, parents' ratings of the child's mood, and display of positive affect were enhanced in the pet-therapy group. Pet therapy likely provides an additional supportive activity for hospitalized children.

Illness and hospitalization constitute a major stress in early childhood development. They effect a profound change in the children's lifestyle as they face separation from parents and from the security of home routines (Petrillo & Sanger, 1980; Kurz, 1987). Play is one way in which children deal with the normative (e.g., developmental stage) and non-normative (e.g., hospitalization) conflicts in their life.

Play enables a child to master anxiety, externalize problems and conflicts, rehearse new solutions, and turn from passive to active roles in conflict resolution (Sturner & Howard, 1997). Play can provide several methods of coping for the hospitalized child (McCue, 1988; Vessey & Mahon, 1990). Play may act as a diversion, refocusing attention away from stressors. It may enable the child to exert some control over a situation by allowing some choices (e.g., which game to play, which dog to pet) to help compensate for the lack of control in other areas of hospitalization. Play may also enable the child to express, master, and ultimately better cope with

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anxieties, fears, and conflicts relating to the hospital experience (i. e., play provides opportunities for the child to assimilate and accommodate to something unknown or distressing in his life; Plank, 1971; Bolig, Fernie, & Klein, 1986; Kaplan, 1995). Although child-life therapy is an integral part of children's hospitals today, there is little research that documents the outcomes of child-life interventions.

The child-life program at University of Wisconsin Children's Hospital offers a variety of developmentally appropriate play opportunities. The child-life sessions included in this study were the open-play (normative-diversionary) time in the playroom. A 90-min time period during the evening was available for children to come to the playroom and participate in activities of their choice. As these children were over age 5, this time primarily included group activities (e.g., working on structured crafts or other projects, and playing games or cards) or individual activities such as playing video games. Child-life staff and volunteers were present in the playroom and interacted with the children as they participated in activities.

Child-life programs face the formidable challenge of providing programming that maximizes the child's coping skills and reduces illness-related stressors. In an effort to develop a new means of helping children cope with hospitalization, a canine pet visitation program, known as "Pet Pals," was implemented at the University of Wisconsin Children's Hospital in 1996, through a collaborative effort between the university's School of Veterinary Medicine and the hospital's Child-Life Department. Volunteers and their dogs were recruited, screened, and trained to visit pediatric patients at the hospital 2 days per week. We will refer to the pet visitation program as "pet therapy" hereafter. The goal of this program was to facilitate the child's coping with hospitalization (i.e., to reduce the child's anxiety and distress).

The "human-animal" bond has been recognized as an important part of therapeutic regimes as early as the 1700s (Arkow, 1993). Dogs have been used in specific pet-facilitated therapy (PFT) health care programs involving both residential and visitation formats. PFT has been used in diverse settings in health care, including intensive care units, long-term care facilities, clinics, children's units, and in adult and pediatric psychotherapy (Reichert, 1994). PFT has been found to promote social interactions and behaviors, increase emotional comfort, decrease loneliness and anxiety, and provide a source of self-esteem and sense of independence (Barker & Dawson, 1998; Brickel, 1979; Calvert, 1989; Churchill, Safaoui, McCabe, & Baun, 1999; Cole & Gawlinski, 1995; Fick, 1993; Holcomb & Meacham, 1989; Kongable, Buckwalter, & Stolley, 1989; Zisselman, Rovner, Shmeuly, & Ferrie, 1996). Physiologic indicators of stress, such as heart rate and blood pressure, decrease when a companion animal is present (Baun, Bergstrom, Langston, & Thoma, 1984; Friedmann, Katcher, Thomas, Lynch, & Messent, 1983; Nagengast, Baun, Megel, & Leibowitz, 1997; Vormbrock & Grossberg, 1988; Wilson, 1987).

With two exceptions, all of the research on pet-therapy programs involves adults. One research team reported decreased heart rate and blood pressure in children having a health examination when a companion dog was present as compared to when the dog was not present (Nagengast et al., 1997). A qualitative study was carried out by Mallon (1994) to examine the effects of a resident dog in the dorms of a residential treatment center for children with behavioral and academic difficulties. Children and staff identified themes of companionship, affection, and touch; acceptance; dog as confidant; and nurturing responses as positive effects of having the dog in the dorms. Quantitative or physiologic measures were not examined in the study. There have been anecdotal reports of increased well-being and reduced anxiety in children (Denver Children's Hospital, 1990; Saint Mary's Hospital, 1995), yet these claims have not been substantiated through experimental research.

In short, although there has been some research into the therapeutic use of animals, there is a significant paucity of research regarding the social, emotional, or physiologic impact of animals on children hospitalized in a medical facility. In addition, research comparing the social, emotional, or physiological efficacy of play therapy versus pet therapy is lacking.

The effects of child-life and pet therapy on subjective child and parent ratings of child mood and observation of mood (through videotaping) were examined in this study. Heart rates and blood pressure were assessed to determine if there were changes related to child-life or pet therapy. In addition, salivary cortisol levels were measured prior to and following therapy. Salivary cortisol levels have been found to be associated with the adrenocortical stress response. Salivary cortisol increases with increased stress in healthy children (Hertsgaard, Gunnar, Erickson, & Nachmias, 1995; Larson, Gunnar, & Hertsgaard, 1991). Less is known about the adrenocortical response in ill children (M. R. Gunnar, personal communication, February 20, 1996). This measure has not been used with hospitalized children or in studies of pet-facilitated therapy.

The following research questions were addressed in this study: a)How do patients rate their mood before and after a single session of child-life or pet therapy; b)how do parents and caregivers perceive a child's mood prior to and following child-life and pet therapy; c) what percentage of time are positive, negative, and neutral emotions displayed during child-life and pet therapy; and d)how does child-life and pet therapy affect physiological indicators of stress, that is, heart rate and salivary cortisol?

METHOD

Participants

A convenience sample of 70 children was recruited from the population of inpatients at a large midwestern children's university hospital. There were 40 children who participated in the child-life group, and 30 in the PFT group. Inclusion criteria included (a) meeting the eligibility criteria for PFT (no allergies to animals, no prior traumatic incidence with animals, and no symptomatic immunosuppression, as well as a willingness to participate in PFT); (b) being 5 years of age or older; (c) having the ability to answer questions; and (d) having the ability to participate in child-life activities.

The mean age of the group was 9.86 (SD = 2.80) years, and there were more boys (56%) than girls (44%) in the sample. The pet and child-life groups were similar in age; the child-life group had more boys than girls, and the pet group was evenly split by gender. Patients were primarily those who had chronic disorders, mainly hematological or oncological disorders, cystic fibrosis, diabetes, transplant, and other medical disorders (see Figure 1). The two groups were similar in regard to diagnosis; the pet-therapy group had a higher percentage (10%) of medical patients and fewer transplant patients (7%) than the child-life group.

Procedure

Child-life staff screened patients to determine eligibility for PFT, invited the child and parents to participate in the study, and asked the parents to sign a consent form if they were willing to participate. Pet therapy occurred only one night per week. Children who were recruited on the day the pets visited and participated in PFT



FIGURE 1 Major diagnoses for sample.

were included in the PFT group. Children who were recruited on other days of the week and participated in child-life activities were included in the child-life group. Our initial plan was to randomly assign patients to group only on the one night per week that PFT was available. However, after discussion with nursing and child-life staff, it was determined that telling children they could not visit the dogs if they were included in the child-life group could cause additional stress, alter the research results, and decrease participant recruitment. Prior to the child-life or pet-therapy session, the child and parent or caregiver were asked to report the child's mood rating and pain rating. At that time, the child's heart rate and blood pressure were measured, and a saliva sample was obtained by asking the child to spit into a cup. During the session, the child was videotaped while involved in the child-life or pet therapy. Immediately after the session, the mood and pain ratings, heart rate, blood pressure, and saliva sample were repeated. The child's chart was examined to determine age, gender, and diagnosis.

Measures

Mood: Patient report. A seven-item mood rating scale was completed by the participants (the scale was read to the children). The items were taken from the Reynolds Child Depression Scale (Reynolds, 1989) and included questions about whether the children felt happy, lonely, sad, worried, bored, like crying, and like playing with other kids. The response format was modified, and children were asked to rate how they felt "right now" about each item using a 3-point scale ranging from 0 (not at all), to 1 (a little), and to 2 (a lot). The items were examined individually (the negative mood items were reverse coded), and a total mood score was calculated by summing the ratings of the seven mood items. The possible range was 0 to 14, with a higher rating being a more positive mood. The reliability coefficients (Cronbach's alpha) were .71 for the seven-item pretherapy patient mood measure and .73 for the seven-item posttherapy patient mood measure. The children were then asked to show how they felt "right now" by pointing to the face on a 7-point facial expressions scale ranging from 1 (a very sad expression) to 7 (a very happy expression). Many researchers have documented the ability of children, aged 5 and older, to discriminate emotions based on facial expressions (Gross & Ballif, 1991; Profyt & Whissell, 1991). Children at this facility are accustomed to reporting pain scores using a "faces" rating scale.

Child's mood: Parent–caregiver report. A four-item mood rating was completed by parents (if available) or by the caregiver (nurse) who was with the child before or after therapy at the same time as the child completed the mood scale.

The parents or caregivers were asked to rate their perception of the child's mood by rating each item (happy, lonely, scared, and relaxed) on a 5-point scale; a higher rating on all items reflected a more positive mood or condition. Individual items and a score derived from totaling the four items were examined. The possible range of the total mood score was 4 to 20, with a higher rating indicating a more positive mood. The reliability (Cronbach's alpha) of the scale ranged from .71 for the posttherapy measure to .76 for the pretherapy measure.

Clinical assessment. During the pet- or recreational therapy session, the child was videotaped for approximately 2 min at the beginning of the session, and at 10 and 20 min into the session. The videotapes were evaluated by a coding scheme adapted from Clark (1985, 1999) to assess the percentage of time the child displayed different types of affect (positive, robust, negative, neutral), time on task, and touching, and the number of times the child initiated activities. (See Table 1 for a description of the coding scheme.) Tapes were evaluated by the same investigator

Variable	Characteristics					
Positive affect	Expression of positive, warm, kind, loving attitude. Displayed by smiles, laughter, positive excitement, sharing playfulness, pride in accomplishments.					
Negative affect	Expression of frustration, anger, negativity, depressed affect, or cold/rejecting attitude. May be manifested by crying, whining, scowling, frustration, anger, lack of interest or pleasure in social stimuli, expressed helplessness or hopelessness, absence of vocal expressions or facial animation, vacant or unfocused gaze, and little or slow movement.					
Anxious-fearful affect	Expression of fear, apprehension, hesitancy, motor tension, nervous laughter, or clinging behavior. May be manifested by child appearing wary, tense, fearful, or apprehensive. Hesitancy, rocking, pulling on ear or hair, motor tension, thumb sucking, baby talk, stuttering, nervous laughter, or persistent questioning or self-doubt may be evidenced					
Neutral affect	No evidence of above affects. Neutral expression.					
Touch-physical contact	Gentle, warm, sensitive touching, hugs, kisses by child to dog or staff or from staff to child.					
Persistence-on task	Maintains goal-directed behavior. Eye contact with project–dog–staff. Shows interest in project–dog. Speaking to, touching, smiling at, playing with, or otherwise responding to task–staff–dog. Actively participating in task.					

TABLE 1 Coding Scheme for Videotape Analysis

Note. All affect items include using tone of voice, facial, and other body language cues.

(author Pellino) with simultaneous collaboration from two research assistants. An Access database with a timing mechanism was developed that allowed the coders to click on-and-off buttons for all coded variables as they viewed the tape. As the tapes were watched simultaneously by the coders, any questions regarding coding were discussed and consensus was reached. There was 100% agreement between coders about the observed behaviors.

Salivary cortisol. Saliva samples were collected prior to the session and immediately after the session. Children were asked to "spit" into a sterile cup. It was not necessary to stimulate saliva production in any of the respondents. The samples were stored at -20° C until the end of the study. They were then assayed for cortisol, a steroid associated with increased adrenocortical response and stress (Gunnar & Nelson, 1994; Hertsgaard et al., 1995). All assays were done in the same batch at the university's veterinary hospital laboratory.

Physiological indicators. Heart rate and blood pressure were measured using a noninvasive blood pressure monitor routinely used on the pediatric inpatient units.

Demographics. Information regarding age, gender, and diagnosis were recorded from the patient's record.

RESULTS

Data were analyzed using the Statistical Package for the Social Sciences. Analysis of variance (ANOVA) using least significant difference (LSD) correction for multiple comparisons was used to examine pretherapy to posttherapy changes for each group and between-group differences for mood, salivary cortisol, and physiologic measures. Between-group differences were examined using independent groups *t* test for the clinical assessment and chi-square analysis for the projective mood responses.

Children had generally positive moods on individual items as well as the total score (Table 2) both before and after therapy. It was determined to use the 7-point face scale for the ANOVA as all items were highly intercorrelated, and the face scale allowed the most variability in response format. There were no significant differences between groups (F = 1.723, p = .165). Parents and caregivers perceived the child's mood to be more positive following child-life or pet therapy than prior to therapy. Parents' and caregivers' ratings of the child's mood indicated an overall increase after either type of therapy. As item intercorrelations were high, only parents' ratings of child happiness were included in the ANOVA. Parents rated

328 KAMINSKI, PELLINO, WISH

their child as happier after therapy than before therapy in both groups, and the pet-therapy group was rated as happier after therapy than the child-life group after therapy (F = 9.49, p < .001; see Table 3).

Tapes were analyzed by segments. The research assistants were given instructions to record what was happening during the sessions without disturbing the natural flow of the therapy. Therefore, varying numbers of segments and

Item	Possible Range	Child-Life Group				Pet Therapy Group			
		Pretherapy		Posttherapy		Pretherapy		Posttherapy	
		М	SD	М	SD	М	SD	M	SD
Нарру	0–2	1.58	0.55	1.55	0.64	1.57	0.68	1.57	0.68
Lonely	0–2	1.60	0.63	1.55	0.64	1.53	0.73	1.60	0.67
Sad	0–2	1.53	0.64	1.55	0.64	1.50	0.78	1.60	0.67
Worried	0–2	1.48	0.60	1.50	0.64	1.63	0.61	1.60	0.67
Bored	0–2	1.10	0.78	1.40	0.78	1.27	0.78	1.47	0.73
Like crying	0–2	1.52	0.68	1.78	0.53	1.77	0.57	1.70	0.60
Like playing with other kids	0–2	1.51	0.60	1.40	0.71	1.43	0.82	1.40	0.72
Total mood score	0-14	10.30	2.93	10.73	2.73	10.70	2.78	10.93	3.10
Faces	1–7	5.80	1.26	5.85	1.46	6.13	1.38	6.43	0.94

TABLE 2 Children's Mood Ratings

Note. Higher score indicates more positive mood rating.

Item		Child-Lif	Pet Therapy Group ^b					
	Pretherapy		Posttherapy		Pretherapy		Posttherapy	
	М	SD	М	SD	М	SD	М	SD
Нарру	3.62	0.92*.**	4.22	.79*.**	3.67	1.20*	4.76	.54*.**
Lonely	3.08	1.26	4.16	.99	3.86	1.20	4.24	.94
Scared	3.73	1.19	4.38	.95	3.86	1.24	4.38	.80
Relaxed	3.84	0.90	4.16	.93	4.19	0.75	4.57	.51

TABLE 3 Parents' Ratings of Child's Mood

Note. Higher score indicates more positive mood; possible range = 1-5.

an = 37. bn = 21.

p < .05, in pre- to posttherapy ratings within group. p < .05, between child-life and pet therapy groups.

varying times of a segment were recorded. For example, if a child left therapy early, there may have been only one or two segments for that child rather than three as desired in the protocol, or if there was a natural break in the activity, the taping would stop. There were 68 segments for the child-life group and 49 segments for the pet-therapy group. The time of pet-therapy segments tended to be shorter and more variable than that of the child-life segments (148.06 \pm 74.46 sec compared to 173 \pm 48.65 sec; t = 2.11, p < .05), perhaps due to the child moving more from dog to dog compared to staying with one activity during child-life activities.

The data were analyzed by computing the percentage of time the child displayed each emotion or amount of time engaged in contact (touching) with the pet or another person. Children involved in pet therapy displayed significantly more positive affect (46% of time during videotaping) and touching (57% of time) than did children engaged in child-life activities (19%, t = -4.72, p < .05; and 0%, t =-11.68, p < .05, respectively). The children in child-life therapy tended to display a more neutral affect during the taping (about 81% of the time) than the children in pet therapy (53%, t = 4.60, p < .05).

Regarding physiological indicators of stress, heart rate was significantly higher in the pet therapy group (99.27 \pm 16.38) than in the child-life group (88.44 \pm 12.68) prior to and following therapy. Due to evaporation from long-term storage of samples, only 16 pretherapy and 14 posttherapy saliva samples from the child-life group and 21 pretherapy and 22 posttherapy samples from the PFT group were available for analysis. Salivary cortisol levels were similar in both groups prior to therapy (. 25 to .27ng/dl) and decreased in the child-life group (.18ng/dl) and PFT group (.22ng/dl) after therapy. These reductions in cortisol were not statistically significant.

DISCUSSION

Overall, the children and parents or caregivers viewed child-life and pet therapy as a positive experience. Children in the pet-therapy group seemed to experience an anticipatory excitement about seeing the dogs; preintervention heart rates were higher for this group than the child-life therapy group.

Children were also asked, "Make believe a child in the hospital can make three wishes. What do you think the three wishes would be?" This technique is often used by psychologists and therapists as a means of allowing children to project their feelings and needs into the hypothetical circumstances posed. The majority of comments (wishes) in the sample were about owning or being with pets, not being sick, and being able to go home. There were also many comments about wanting various possessions (e.g., being rich, having a video game), wanting to do things such as play, wanting changes in the hospital such as more to do or the recreation room being open longer, and being with family and friends. Fewer comments focused on future plans or hopes, global health (e.g., cure diabetes), fantasy (e.g., never die, do whatever I want), and removal of tubes or IVs. Not surprisingly, the children who were in the pet-therapy group tended to mention being with pets and wanting to play more often than did the child-life group. For both groups, there were fewer comments after therapy about being ill and wanting to go home than prior to therapy. Perhaps distraction of play or pets made thoughts of illness and focus on going home less salient in children's minds

Salivary cortisol has been used primarily in infants without disease. Using this measure for hospitalized children was an exploratory attempt to find a noninvasive measure of stress. Many of the children in this study were immunocompromised to some extent. Gunnar & Nelson (1994) reported cortisol levels of .35ng/dl in the afternoon in their sample of 1-year-old children. The average level for our participants was lower than that reported by Gunnar & Nelson, and several (17%) of the samples had a cortisol level of < .12 ng/dl. It has been noted that cortisol levels decrease during daylight hours. As there was a 2-hr time difference in collection of our samples, some of the decline may be attributed to the time interval. Gunnar & Nelson noted a decline from .41ng/dl to .35 ng/dl from morning to afternoon in their sample, so it is unlikely that a decrease of .5 or .8 ng/dl occurred only as a result of time of sample collection. The reduction in cortisol was not statistically significant, perhaps due to the small number of samples available for assay. Further studies are needed to explore the relation between normative play and indicators of stress. We noted that the salivary cortisol did not decrease as much for the pet-therapy group as for the child-life group. One aspect of examining salivary cortisol that has not been explored is whether increased cortisol levels are indicative only of stress or whether increased excitement could result in elevated cortisol levels. We found a .20 correlation (p = .087) between the faces scale used for mood and salivary cortisol. Patients who reported a happier mood tended to have higher cortisol levels. This relation could be explored more systematically in future studies.

A somewhat paradoxical finding, compared to that reported in the literature, was that patients in the pet-therapy group had higher heart rates than those who attended child-life. Two factors may be responsible for this finding. Heart rates were not monitored during the actual pet therapy, as in many studies, so we do not have an indication of whether heart rates were actually elevated during the session. The second consideration is that in some studies in which heart rate and blood pressure have decreased with pet therapy, the participants have been faced with a stressful event, such as a physical examination (Nagengast et al., 1997). The children in our study were not involved in a stressful activity when the dogs were present.

It is no surprise that patients who were in the pet-therapy group had more physical contact or "touch" with the animals than patients in child-life had with staff or other children. The importance of touch has been described by several authors. Kellerman et al. (1976) noted that lack of skin-to-skin contact (such as that experienced by patients in isolation) can result in "tactile hunger" or an increased need for physical closeness. Touch has been described (Churchill et al., 1999) as fulfilling functions such as comfort and contact with reality. Weiss (1979) considered touch a necessary element of physical health. Studies provide evidence that touch is a major component of the effectiveness of pet therapy. Vormbrock & Grossberg (1988) noted that touch appeared to be the major component of the pet "effect" of reduction of blood pressure and heart rate whereas cognitive factors related to being with animals contributed to a lesser degree. In one study, "contact comfort" with a dog (Friedmann, Katcher, Lynch, & Thomas, 1980) was associated significantly with reduction of heart rate and blood pressure. Whereas we found that heart rate was elevated after pet therapy, as indicated previously, we did not monitor heart rate during either of the conditions (while petting the dogs or during child-life). Although there were positive effects noted from child-life in this study, further research should be conducted on the impact of play on children's physical and emotional adjustment during hospitalization.

Some limitations of this study warrant discussion and raise issues for future research. A major limitation of the self-reported patient mood instrument was the limited variability in choices for the child. We were initially concerned about the ability of young children to differentiate between choices and thus used only a 3-point response range (not at all, a little, and a lot). We found that using the 7-point faces scale provided more variability for analyses and would recommend using a scale with more variability in the future. In addition, this study did not assess for the impact of social desirability on participant behavior. There were some restrictions on the participants in the study. Children younger than age 5 were not included, and often the "sickest" children (e.g., those who were immunosuppressed, too ill to leave their room, or on bed rest) did not participate in the therapy or study. Some patients may have chosen not to participate based on their mood. In addition, because of our choice to collect data in as naturalistic a setting as possible, we did not require the children to go to the play room or to pet the dogs immediately after the measures were taken. Events other than the therapy could have been occurring between the time the two measures were taken, such as a particularly good or bad meal being served to the child. There were times parents were not available for the mood rating, so we needed to rely on caregivers' opinions in some cases. These may not have been as sensitive to the child's mood as the opinions of the parents. Coding of the videotape, for obvious reasons, were not blinded to the investigators. The use of two to three coders for validation of coding helped alleviate any questions about interpretation. Lastly, we ran into some "technical," sometimes humorous, difficulties in collecting and analyzing the saliva. Unfortunately, several of the samples were too dehydrated after freezing to analyze; we had one instance of "Skittles" contamination in the saliva collected; and one 5-year-old child refused to provide a sample because he had been told by the parents that it was not polite to spit.

IMPLICATIONS FOR CLINICAL PRACTICE

Interventions that promote normalcy while a child is in an unfamiliar setting such as a hospital need to be incorporated into the child's care. The current research on the therapeutic use of animals leads one to consider a multitude of clinical possibilities. An intervention could be as subtle as the use of an aquarium in a waiting area, advantageous to both patients and families and of minimal maintenance in a time of limited resources. Planning for a patient's identified needs, such as the inclusion of pet therapy and child-life activities, may positively influence the outcomes for that individual. While obtaining an initial patient health history on admission, a health provider has a prime opportunity to assess the importance of animals or a pet to an individual and to inquire about the patient's favorite play activities. Child-life services fill a need for hospitalized children by decreasing boredom and involving the children in more "normal" activities. Therapeutic use of an animal could provide needed distraction or unconditional companionship for some patients, such as those who experience multiple admissions or those who may be hospitalized for extensive periods of time. Animals could make an unfamiliar hospital setting more homelike, enhance the family's perceptions, and perhaps promote recovery. One of the major "additions" that pet therapy offers to child-life therapy is the "touch" component. Whereas introducing touch in other situations is often difficult, petting a dog is the child's decision and provides skin-to-skin (well, actually hair) contact that may be lacking while the child is hospitalized. This is particularly salient for children hospitalized frequently or for long periods of time, or for those whose families are not able to visit often. Parents shared in their evaluations of the child-life-pet-therapy programs that they felt less guilt about not being able to be with their children at all times because they knew their children would be participating in these activities. In addition to patient benefits, we have garnered a tremendous amount of community support and positive public relations as a result of pet therapy.

Although we were able to capture some of the benefits of child-life and pet therapy, this unedited quote from one of the children who participated in PFT summarizes the benefits: Pet pals is a good thing for kids in the hospital, it gives kids something to do. All the kids in the hospital love petting them and it reminds them of there dog thats at home bye its self missing its oner and the kid that has the dog when he pets the dog it reminds him of his or her dog and the dogs love the kids.

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334 KAMINSKI, PELLINO, WISH

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