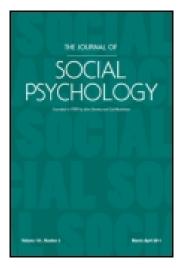
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The Role of Pet Dogs in Casual Conversations of Elderly Adults

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ABSTRACT. Casual conversations were recorded as elderly persons routinely walked their dogs through a familiar mobile home park in the United States. Control observations included walks without dogs by owners and non-owners of dogs. All owners talked to and about their dogs. Transcribed conversations indicated that dogs were a primary focus of conversation. A majority of sentences to dogs were imperatives; the owners were instructing the dogs. Dog owners frequently included dogs' names or nicknames in their sentences when they spoke to the dogs and made reference to the dogs' wishes or needs. Speaking to dogs was also associated with frequent repetition of sentences. Passersby talked to the owners about their dogs whether or not the dogs were present. When dog owners spoke with other people, their conversations often concerned activities that were occurring in the present, whereas conversations of non-owners focused on stories about past events. Dog owners reported taking twice as many daily walks as non-owners. Dog owners also reported significantly less dissatisfaction with their social, physical, and emotional states.

PETS MAY SERVE TO BUFFER and normalize aging persons' sense of social isolation. In a study of elderly New Zealand women, pet cats appeared to reduce loneliness by substituting for some aspects of social interaction (Mahalski, Jones, & Maxwell, 1989). In Rhode Island, attachment to pets has been found to be especially high among those who have been widowed or have never married (Albert & Bulcroft, 1988). In several North American studies, pet ownership or attachment has been shown to be associated with the maintenance of physical or emotional health during bereavement (Akiyama, Holtzman, & Britz, 1987; Lund, Johnson, Baraki, & Dimond, 1984).

Non-pet owners reported a deterioration of health after the loss of a spouse, whereas dog owners who had formed a bond with their dogs reported no such deterioration if their health was good (Bolin, 1987). Particularly when it involves a close attachment, pet ownership among elderly individuals has been associated with less depression among bereaved persons who have recently lost a spouse and who have few or no confidants (Garrity, Stallones, Marx, & Johnson, 1989).

In documenting the fact that elderly people are at risk for social isolation, researchers have shown that in New York City elderly people receive less favorable treatment by physicians (Greene, Adelman, Charon, & Hoffman, 1986). Some elderly people in the United States have no human friends in whom they confide (Garrity et al., 1989). In one study of the relationships of 92 elderly people and their dogs, the dog was found to be the only friend for a strong majority of the men and women (Peretti, 1990). Recent studies have provided behavioral data demonstrating that pets stimulate social interactions. Dogs significantly enhanced friendly approaches in studies of people walking their dogs in a London park (Messent, 1984a) and of American adults or children who use wheelchairs and are accompanied by a service dog (Eddy, Hart, & Boltz, 1988; Mader, Hart, & Bergin, 1989). This socialization would be most valuable for individuals who are feeling isolated, including elderly people, who are often discounted or rejected.

In addition to facilitating social contact with people, dogs are willing companions who are virtually always available. Most North Americans report that they talk to their dogs (Katcher, 1981). In the laboratory setting, the language people use with dogs has been shown to be similar to babytalk, or motherese (Hirsh-Pasek & Treiman, 1982).

Mobile home parks provide an opportunity to explore the social interactions of elderly people with their dogs and other people because pets are generally permitted in mobile home parks, and a high proportion of the residents have dogs (Hart, Fox, & Rogers, 1992). Also, mobile home parks are characterized by a secure and somewhat uniform environment that features limited access and reduced traffic. This setting attracts elderly residents and promotes activity and social interaction among them (Johnson, 1971). In the present study, we examined the social interactions of elderly people as they routinely walked their dogs. The schedules of the elderly participants were unconstrained by employment. Age homogeneity, cohesiveness, and a large

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number of residents (common characteristics of mobile home parks) have been shown to positively influence social interactions among elderly residents (Hinrichsen, 1985; Lemke & Moos, 1989).

We hypothesized that the dog would serve as a focal point or target of conversation. One of our objectives in this study was to compare dog owners and non-owners with regard to their conversations while walking, their exercise levels, and their general social and psychological functioning.

Method

Subjects

The participants were recruited through the managers of 29 California mobile home parks in Sacramento and Yolo county that had been previously identified as permitting pets, expressing a positive or neutral attitude toward pets, housing a majority of elderly residents, offering a common area for residents, and being willing to assist in a study concerning dog ownership (Hart et al., 1992). The managers provided referrals to potential subjects over the age of 65 who either did or did not own dogs, and home visits or clubhouse meetings were arranged. The residents were told that we were interested in learning what happens during a typical walk in the mobile home park. We explained that because it was not possible to unobtrusively accompany the resident or to videotape the walk, we would use audiotaping to provide some indication of a typical walk.

The participating dog owners included 5 women (2 married, 3 widows) and 1 man (married) whose median age was 69 years; range 65–78 years, and who resided at six different mobile home parks. The dogs, which included a cockapoo, miniature poodle, beagle, German pointer, chihuahua, and spaniel, resided primarily indoors and were leashed while walking. A control group, whose median age was 67 years; range 65–78 years, comprised 4 women (3 married, 1 widow) and 2 men (married) and represented the same mobile home parks but did not own dogs. All the subjects were able-bodied.

Procedure

The dog owners took two walks, one walk with and one without the dog, and the non-owners took one walk. Each walk was recorded on a minicassette tape recorder that the subjects were requested to carry discreetly during walks. The participants were encouraged to take a typical walk and ignore the tape recorder. For dog owners, the order of walking with and without the dog was counterbalanced. We interviewed the subjects after the first walk. The interview consisted of questions about the walk and the general walking routine, as well as 31 questions from the Older Americans Resource Survey

(OARS), developed by Duke University (1978). Twenty-five of the questions concerned health, social, emotional, and daily living parameters, and 6 reported specific disease conditions.

Data Transcription and Analyses

The tape recordings from the walks were transcribed. The transcribed conversations of the walkers and the passersby were analyzed for specific characteristics of sentences or phrases, and the nouns and pronouns and verb tenses were categorized. The procedures for classification were tested and verified by the two transcribers for interrater reliability. Kappa coefficients for classifying the conversational characteristics and content exceeded .95 (Cohen, 1960; Hollenbeck, 1978).

To analyze the conversations directed to dogs versus those directed to persons, we counted the numbers of sentences and words uttered by (a) the walker and (b) the passersby during each walk when they spoke to (a) the dog and (b) persons. The number of sentences with specific characteristics was noted: imperatives, questions, repetitions, empathic sentences, which concerned the needs, wishes, or intentions of the conversational companion, and sentences that included proper names or nicknames directed to the conversational companion. The subjects' mean sentence lengths and percentages of sentences that possessed each of the characteristics listed previously were computed for each walk in speech to dogs and to people.

For a detailed analysis of conversations between people, each sentence or phrase uttered to a person was counted and categorized according to the conversational context in which it appeared: (a) greetings—hailing or welcoming to attract or stop another ("Hi, D., How are you doing?"); (b) casual remarks—one- or two-sentence exchanges about general subjects without definite intention and usually oriented toward the present ("Oh, look at the quail." I just love them the way they just run around here like pets."); or (c) stories prolonged exchanges dealing with definite themes that range from informal entertainment to detailed narratives, and where the orientation may be past, present, or future ("The little thing caught the flu. It went into pneumonia. Now it's gone into something else."). All the nouns and personal pronouns in the utterances addressed to a person were counted and designated as being uttered by the walker or the passers by and as occurring within greetings, casual remarks, or stories. All the nouns and pronouns in these utterances that referred to dogs were categorized and counted. A total count of the verbs in these utterances was made and categorized as (a) past or (b) present or future tense. For comparison, the verbs addressed directly to dogs were also counted.

For each measure that was subjected to statistical analyses, scores were derived from each walk. Scores from the 6 subjects in each group were used

for statistical analyses, representing the three types of walks: (a) dog owners walking with their dogs; (b) the same dog owners walking without their dogs, and (c) the control group of residents who did not own dogs walking without dogs. Because the data were not normally distributed, we used nonparametric statistical tests; the data are presented as medians, sometimes with ranges. For interviews, the dog owners were compared with the control group of nonowners.

Results

Walks by Residents

When interviewed, the dog owners reported that they routinely took a median of two walks per day, significantly exceeding the one walk per day reported by residents without dogs (Mann-Whitney one-tailed U test, U=0, p<0.00). The estimated reported duration of the typical walk, 30 min for dog owners and 29 min for residents without dogs, did not differ for the two groups. For the actual walks taperecorded in this study, the median duration for residents walking with their dogs was 24 min, and for the residents who did not own dogs, 23 min. Dog owners walking without their dogs shortened their walks to 13 min.

Conversations During Walks

The subjects greeted a median of 8 to 11.8 passersby per hour, and there were no significant differences in the median rates at which the dog owners walking with or without their dogs and the non-owners encountered and greeted passersby. Owners and non-owners exhibited a wide range of social interactions. Among the 6 dog owners, 2 engaged in almost no conversations with passersby, and 1 conversed at great length. Similarly, 2 non-owners talked very little, and 3 conversed for a large proportion of the time. The duration of time spent talking during the walks, the number of sentences exchanged, and the number of verbs uttered to people by walkers or passersby did not differ significantly in the three conditions. The mean lengths of utterances also did not differ significantly for the owners speaking to the dog (5.2 words) or to a person (5.0 words) with the dog absent, or for the non-owners to persons (5.3 words).

Content Analyses of Conversations

The specific characteristics of utterances to a dog versus those to a person are summarized in Table 1. When the owners spoke to their dogs, the majority of their statements comprised imperative sentences, in sharp contrast to the neg-

TABLE 1 Utterances to a Dog or Person by Persons Taking Walks, Expressed in Median Percentages of Sentences

	Dog owners $(n = 6)$			
Type of utterance	Dog present		Dog absent	Non-owners $(n = 6)$
	To dog	To person	To person	To person
Imperative	57.5	1.5	5	0
Question	13.5	10	13	9.1
Repetition	32	6.5	0	0
Names included	25.5	1	0	0
Empathics	11	0	0	0

ligible proportion of imperative sentences that were directed to other persons (sign test: p < .05) or to those that were used in the language of non-owners (Fisher exact probability test: p < .01). Language to dogs more frequently included partial or full repetition of the previous utterance, and a higher proportion of sentences included the name or nickname of the dog as compared with the use of a person's name in conversation with a person (sign test: p < .05). Sentences that were addressed to dogs more frequently included references to the dogs' needs, wishes, or intentions, in contrast to sentences addressed to persons (sign test: p < .05).

Non-owners used a higher proportion of stories versus greetings and casual remarks in their conversations, as compared with dog owners when walking with or without their dogs (see Figure 1). Stories accounted for a median of 34.7% of the nouns in the conversations of residents who did not own dogs. but stories accounted for none of the nouns in the speech of a majority of dog owners walking with or without their dogs (U = 3, p < .01). Stories generally concerned the walkers or other park residents and frequently pertained to health issues: "Sam's been blacking out. I think we should keep an eye on him. . . . I asked, 'Have you been to the doctor?' . . . "; "I had a real bad day Saturday . . . I was out with a friend . . . in the heat with no hat and I got sick. . . ." Reflecting the frequent storytelling, the conversations of walkers who did not own dogs with passersby had a median of 36% of the verbs in the past tense, as compared with a median of no verbs in the past tense for dog owners walking with their dogs (a nonsignificant trend, U = 5, p < .1), and 15% when they were walking without their dogs (U = 1, p < .05).

When talking with passersby, dog owners who walked their dogs more frequently than non-owners referred to dogs in their conversations, as indicated by the proportion of their nouns or pronouns that referred to people or

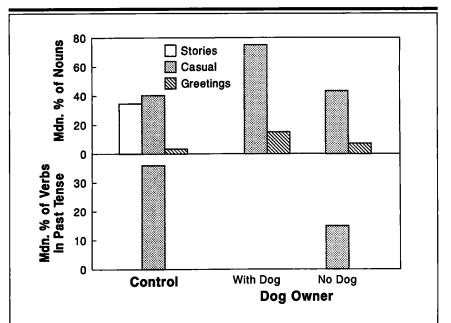


FIGURE 1. Median percentage of nouns used in stories, casual statements, or greetings, and median percentage of verbs in the past tense in conversations of a walker and passersby, as a function of dog ownership and the presence of the walker's dog.

dogs (see Figure 2). While walking their dogs, owners referred to dogs in a significantly higher proportion of their remarks to passersby (75%) than when they walked without their dogs (29%) (sign test: p < .05). References to dogs comprised only 6% of the remarks when the residents did not have dogs (U = 0, p < .01). Passersby who encountered a dog owner walking a dog made a significantly higher proportion of references to dogs (25%) as compared with when they encountered a non-owner (3%) (U = 0, p < .01). Even when passersby encountered a dog owner whose dog was absent, 28% of their nouns concerning humans or animals referred to a dog, generally the owner's dog.

The dog was a frequent focus of conversation during all walks with dogs. All the owners talked to their dogs: "We're going this way, puppy, come on. . . . Watch for the car. . . . You want a drink?" Owners devoted more of their sentences to talking to the dog (21.5 sentences per walk) than about it (4.5 sentences per walk) (sign test: p < .05). Talking about the dog often focused on the dog's behavior: "He grooms himself like a cat, you know, when he gets home with muddy little feet"; "Tiger hasn't been eating so well the last couple of days. He's been turning his nose up at his dinner"; "Maybe

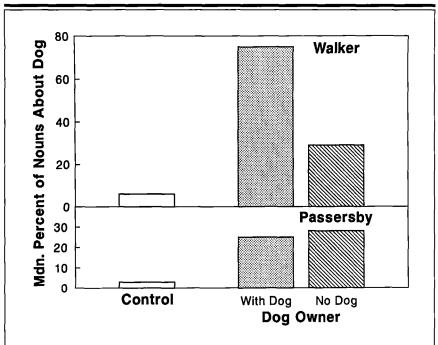


FIGURE 2. Median percentage of nouns concerning people or animals that referred to a dog, as spoken by the walker or the passersby greeted on the walk, as a function of dog ownership and the presence of the walker's dog.

it's the change in the weather. I know he gets moody, and I get a little bit moody too." Of all the verbs uttered by owners while walking their dogs, a median of 60% were addressed directly to the dog.

Well-Being of Residents

In responding to the 25 questions adapted from the OARS test concerning social, mental, and physical satisfaction, residents who did not own dogs gave responses that reflected compromised well-being to a median of four items (range 0-9), as compared with one item (range 0-3) for dog owners (U=5, p<.05). The questions on which non-owners indicated deficits in well-being dealt with the extent of regular socializing with friends and relatives, caretaking assistance when needed, number of days of recent sickness, and rating of general health as compared with 5 years ago (see Appendix). However, the responses to the 6 questions reporting specific disease conditions did not differ significantly for the two groups.

Discussion

Dog owners reported a pattern of walking twice a day, whereas non-owners reported a similar walk only once a day. These results are consistent with those of Serpell (1990) in a prospective study of English dog owners that was initiated at the time of pet adoption, where the weekly duration of self-reported walking increased severalfold as the puppy became older (Serpell, 1990). In addition to the conversational effects shown in the present study, walking dogs may relate to significant increments in health for specific medical conditions. For example, in studies of Chinese men and women with hip fractures, daily walking outdoors or uphill was associated with reduced incidence of hip fracture for women (Lau, Donnan, Barker, & Cooper, 1988). Higher levels of activity in the middle years were protective for men and women. Similarly in Southampton, England, regular activity was reported to be protective against hip fracture (Cooper, Barker, & Wickham, 1988). One would predict that prescriptive dog walking would provide this benefit that has been associated with regular exercise.

Recent evidence that dog ownership is associated with fewer doctor visits for elderly people (Siegel, 1990) supports the notion that dogs can enhance well-being. A prospective study of new dog owners has reported significant improvements in general health following the pet adoption (Serpell, 1990). Although the owners and the non-owners in the present study reported a similar number of established medical conditions, the non-owners were similar to these recent studies in describing themselves as feeling less supported and less well in general health. It was not within the scope of this study to assess psychological factors, and it is possible that they might account for some of the variation among the elderly persons. However, the correlational contrast between owners and non-owners is also consistent with the results of studies of bereaved elderly people in which pet ownership has been associated with greater physical or emotional health (Akiyama et al., 1987; Garrity et al., 1989; Lund et al., 1984). Evidence is increasing that social relationships play a significant role in promoting health (House, Landis, & Umberson, 1988). Because people commonly are closely attached to animals, it is plausible that supportive relationships with animals can enhance human health (Rowan, 1989).

Walks with a dog were routine events that often involved encountering the same friends. When a dog was present, conversations during the walk concerned the present events. The dog played a role in capturing attention on the here and now. The dog also played a central role for the owner as a focus of conversations with other people. In talking to and about the dog, the walker and passersby had near at hand a comfortable companion and a target of conversation. An earlier study has demonstrated that even small animals, such as a rabbit or a turtle, become the major topic of conversation for unfamiliar

passersby who approach (Hunt, Hart, & Gomulkiewicz, 1992). Messent has proposed seven alternatives for how pets might affect social interactions, including as (a) a basis for making social judgments, (b) a source of envy or self-esteem, (c) a novelty, (d) an innate release mechanism, (e) a source of common interest, (f) a social facilitator, and (g) an "ice breaker" (Messent, 1984b). All but the first two could play a role in conversations.

In the familiar mobile home park community, residents encounter few strangers when walking. A person and dog who routinely walk together come to be seen as a team. This perception is undoubtedly why about one fourth of the nouns of the passersby meeting a dog owner referred to the dog, whether or not the dog was present. Older persons, who have seen most of their social roles disappear (Gubrium & Lynott, 1983), can benefit from this socially facilitating role.

Dog owners talked regularly to their dogs during walks. As if conversing with people, dog owners asked the dogs questions. In one study, over 96% of elderly pet owners reported that they talk to their pets (Stallones, Marx, Garrity, & Johnson, 1988). Laboratory studies have reported that pet owners speaking to their birds adopt a more comfortable style of conversation, using shorter sentences, a softer voice, and words that are reminiscent of baby talk (Katcher, 1985). Convicts use a stereotyped style of discourse with their pets, lowering their voices, decreasing the rate of speech, asking their pets questions, and pausing, as if the animals were going to reply (Katcher, Beck, & Levine, 1989).

The utterances used by the subjects while walking were of similar length, whether they were speaking to the dog or a person. In a laboratory study in which women were recorded while they spoke privately to their dogs and then to an experimenter, the utterances to the experimenter were longer than those to the dog, perhaps reflecting the formal laboratory setting (Hirsh-Pasek & Treiman, 1982). Both studies reported that most of the subjects' sentences were imperative when they spoke to dogs, but few sentences were imperative when they spoke to people, and there was a greater proportion of repeated utterances in speech to dogs.

When speaking to their dogs, owners included the dog's name in about one fourth of their utterances. However, they rarely used a person's name in a similar way. Using the listener's name in an utterance is common in motherese as a device to gain the child's attention (Snow, 1972). Young children use a similar pattern of language when they speak to their dolls; a high proportion of utterances include the doll's name (Sachs & Devin, 1976).

Language used with young children generally focuses on the immediate context and is in the present tense (Sachs, 1983). In the current study, we found that, when speaking to dogs or to people, owners generally avoided the past tense, whether or not their dogs were present. It appears that when own-

ers walk their dogs, the dogs establish a context wherein the owners focus on their ongoing activities.

The results of this study suggest that a dog is a conversational companion for its elderly owner. The owner's numerous remarks addressed to the dog are in language that is specially tailored for the dog. Acquaintances acknowledge the significance of the dog by their frequent references to it, whether or not the dog is present.

APPENDIX

Questions From the Older Americans Resource Survey (Duke University, 1978) on Which Non-Owners Indicated Deficits in Well-Being (Italicized items were considered to reflect concern or dissatisfaction)

- 1. How many times during the past week did you spend time with someone who does not live with you, that is, you went to see them or they came to see you or you went out to do things together? 1) seven or more times, 2) two to six times, 3) once, 4) not at all, 5) not answered.
- 2. Do you see your relatives and friends as often as you want to, or are you somewhat unhappy about how little you see them? 1) as often as wants to, 2) somewhat unhappy about how little, 3) not answered.
- 3. Is there someone who would take care of you as long as needed, or only for a short time, or only someone who would help you now and then (for example, taking you to the doctor, or fixing lunch occasionally). 1) someone who would take care of subject as long as needed, 2) someone who would take care of subject for a short time (a few weeks to six months), 3) someone who would help the subject now and then, 4) not answered.
- 4. During the past six months how many days were you so sick that you were unable to carry on your usual activities, such as going to work or working around the house? 1) none, 2) a week or less, 3) more than a week but less than a month, 4) one to three months, 5) four to six months, 6) not answered.
- 5. Is your health now better, about the same, or worse than it was five years ago? 1) better, 2) about the same, 3) worse, 4) not answered.

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