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PETS GO TO COLLEGE: THE INFLUENCE OF PETS ON STUDENTS' PERCEPTIONS OF FACULTY AND THEIR OFFICES

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ABSTRACT

The present study examined the effects of the presence of a pet in a professor's office on college students' perceptions of the office and the professor. Students (n=257) were randomly assigned to view a slide of an office that contained either a dog, a cat, or no animal. Students perceived the office to be more comfortable and the professor to be friendlier when there was a dog in the office than when there was a cat or no animal in the office. They also perceived the professor who occupied the office with a cat to be less busy than the professors who occupied the offices with a dog and with no animal. These results imply that professors may be able to positively influence students' impressions of them by having a dog or a cat in their offices. © 2001 International Society for Anthrozoology

INTRODUCTION

an the presence of a pet in a college professor's office affect students' perceptions of both the office and the professor? Previous research suggests that we form impressions of people based on their environmental contents. One environmental factor that appears

of people based on their environmental contexts. One environmental factor that appears to influence perceptions of others is the presence of an animal. However, can the presence of an animal influence perceptions of the animal's owner even when that owner is not present? The current research explored the effect of the presence of a pet in a professor's office on college students' perceptions of the office and the unseen professor.

It has long been recognized that people express themselves through their environments (Sommer 1974; Brown 1987). Individuals tend to personalize (i.e., decorate or modify) both their residential environments and their work environments to express their identities, personalities, and emotions (Vinsel et al. 1980; Brill, Margulis, and Konar 1984; Scheiberg 1990; Smith 1994; Wells 2000). Likewise, people often form impressions of others simply by examining the environments in which they live and work. A considerable

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amount of research has been conducted in settings such as neighborhoods, houses, living rooms, and workplaces which suggests that people make assumptions about the characteristics (e.g., age, gender, social status, income, personality) of the individuals associated with these places (Cherulnik and Souders 1986; Sadalla, Vershure, and Burroughs 1987; Osborn 1988; Nasar 1989; Sadalla and Sheets 1993; Wilson and Mackenzie 2000). And, interestingly, many times they are right (Sadalla, Vershure and Burroughs 1987). Studies also suggest that observers agree on which particular features of environments are indicative of the owners' characteristics (Wilson and Mackenzie 2000).

Several studies have focused on workplaces. Many such studies have examined college students' perceptions of faculty offices. For example, several studies have compared the traditional "desk-in-between" arrangement (i.e., the desk is between the professor and the visitor) to the more non-traditional "desk-tothe-side" or "open" arrangement (i.e., the desk is not separating the professor and the student but rather is against a wall). Faculty offices with the "desk-to-the-side" arrangement are perceived as more comfortable and more welcoming to students, and students prefer to stay longer and feel it is easier to get acquainted with faculty in the "desk-to-the-side" arrangement than in the "desk-in-between" arrangement (Zweighenhaft 1976; Campbell 1979; Morrow and McElroy 1981; Darby and Judson 1987). In addition, the faculty themselves are perceived as more friendly and more interested in students when using the "desk-to-the-side" arrangement (Morrow and McElroy 1981). The desk is perceived as a symbolic barrier that physically and psychologically separates the professor and the visitor.

Research also has examined a variety of other environmental features of faculty offices (Campbell 1979; Morrow and McElroy 1981). In these studies, student participants were shown slides of several offices that varied in terms of neatness and the presence of status symbols, art objects, and living things such as fish and plants. It was concluded in these studies that the level of neatness had the strongest impact on student ratings of professors. Neatness led to strong positive ratings regarding comfort and feeling welcome in the office, whereas messiness and clutter led to strong negative ratings. However, one study included an intermediate level of neatness which was favored over extreme neatness and extreme messiness (Morrow and McElroy 1981). Although status symbols do not affect students' feelings of comfort and feeling welcome, they do appear to influence their perceptions of the professor's achievement orientation, rank, interest in research, and interest in service (Morrow and McElroy 1981). In addition, faculty offices with art objects, plants, or fish are perceived as more comfortable, more inviting, and more welcoming than offices without these items (Campbell 1979; Morrow and McElroy 1981). Furthermore, the faculty themselves are rated as more friendly, less busy or rushed, and as having more in common with the visitor when they have these items in their offices than when they do not (Campbell 1979).

Interestingly, there appear to be some differences in male and female students' perceptions of faculty offices. For example, in the studies of office content (art, plants, fish), males rated all the office arrangements, including those without these items, more positively than females did, perhaps indicating that they are less negatively influenced by office content (Campbell 1979; Morrow and McElroy 1981). However, females were more positively influenced than males by the presence of plants and fish (Campbell 1979). Also, in a study of desk arrangement, males were more negatively influenced than females by "desk-in-between" arrangements (Darby and Judson 1987). In comparison to females, they perceived this arrangement as less conducive to getting acquainted and showed less preference for staying in the office after their business was finished. These findings suggest that males and females differ in terms of what they perceive to be a comfortable, welcoming office.

In summary, students form more favorable impressions of faculty when their offices have open desk arrangements, art objects, and living things such as plants or fish, and are moderately neat and uncluttered. However, males and females differ in their responses to these offices.

Another feature of an office environment which might influence visitors' perceptions is companion animals, or "pets" as they are commonly called. The practice of bringing one's pet to work appears to be growing (McCullough 1998), and some research suggests that employees working in offices with pets have very positive feelings regarding pets in the workplace (Wells and Perrine 2001). Employees perceive pets as making the work environment more comfortable, providing a pleasant diversion from work, providing companionship, reducing stress, and positively affecting employee health, as well as organizational issues such as employee morale, absenteeism, and turnover. Employees also perceive that pets benefit customers by entertaining and relaxing them. Would pets in a faculty office have similar effects on students?

Research on pets suggests that they have many benefits for human beings. One of the main benefits of pets is that they facilitate social interaction between people (Veevers 1985). They often serve as "social lubricants" by serving as a conversation piece and increasing communication between people of all ages (Mehrabian and Diamond 1971; Mugford and M'Comisky 1975; Veevers 1985). Pets have been used in therapy with children as ice-breakers, to open up communication between the therapist and the child (Levinson 1969). They also can facilitate social interaction among the elderly: the introduction of a pet into a nursing home has been found to increase social interaction among residents and staff (Corson and Corson 1978; Brickel 1986; Struckus 1991; Hart 1995).

In addition to the social benefits, pets also appear to have physiological benefits for people: Several studies suggest that the presence of a dog can reduce the blood pressure of both adults and children engaged in stressful activities (Friedmann et al. 1983;

Nagergost et al. 1997; Allen 1999). Fish produce similar effects: as people watch fish in an aquarium, their blood pressure decreases (Katcher et al. 1983). Even non-domesticated animals have this stress-reducing effect on humans. For example, caretakers of chimpanzees have lower blood pressures and heart rates while watching these animals than while relaxing (Eddy 1995). Similar results were reported in a case study with a male snake-owner: The snake-owner had lower blood pressure and heart rate while watching his pet snake than while sitting alone relaxing (Eddy 1996).

Many other studies have examined reactions to animals using photographs of animals rather than live animals. These studies have concluded that viewers' perceptions of people and environments are significantly influenced by the presence of an animal (Lockwood 1983; Rossbach and Wilson 1992). For example, people in photographs were seen as more friendly, less threatening, and happier when an animal also was pictured (Lockwood 1983). Additionally, pictures of people with dogs were rated more positively than pictures of people with flowers, and the people in the pictures with dogs were perceived as more relaxed and happy (Rossbach and Wilson 1992). As Lockwood (1983) notes, the ability of animals to influence perceptions of people has long been recognized by advertisers who frequently pair animals with product spokespersons to convey trustworthiness and credibility.

Further research suggests that different species of animals elicit different perceptions. For example, a woman was rated more likable when pictured with a dog (Labrador Retriever) than when pictured with a cat (Persian), a bird, or no animal (Geries-Johnson and Kennedy 1995). In addition, a woman was rated as nicer, more stylish, and more active when pictured with an uncommon breed of dog, a Weimaraner/Labrador mix, than when pictured with an uncommon breed of cat, an Abyssinian (Budge et al. 1996). Conversely, a man pictured with these same animals was seen as nicer, more stylish, and more active with the cat than with the dog. Furthermore, both the man and woman were rated as less nasty when with either animal than when alone.

In summary, animals can facilitate social interactions, reduce stress, and influence perceptions of environments as well as the people who accompany them. The present study is the first to explore whether ani-

mals also influence perceptions of a person who is not shown with the animal. Specifically, do pets in a professor's office influence students' perceptions of the office and the unseen professor?

Research Questions

Four key questions were addressed. First, do students perceive professors' offices with a pet as more comfortable than such offices without a pet? Second, do students perceive the professors themselves to be more friendly and less busy when there is a pet in the office than when there is not? Third, does the type of pet, either a cat or a dog, affect students' perceptions of the office and the professor? Finally, do males and females differ in their perceptions of offices with and without pets?

METHODS

Participants

Participants were 257 undergraduate students (201 female, 56 male) from Eastern Kentucky University (EKU) who volunteered to take part in a study on perceptions of faculty offices. Students were enrolled in either introductory psychology or research methods courses and received partial course credit for participation. Most participants were of traditional college age (males: Md=21, range 18–42; females: Md=20, range 17-45). Although race information was not collected, university statistics report that 95% of EKU students are Caucasian. Furthermore, some participants reported allergies to dogs (6%), and some reported allergies to cats (16%).

Materials

Materials consisted of a questionnaire and three slides of a professor's office. One slide, the control slide, showed a carpeted office with a metal desk, a chair, a computer desk, and a computer. The office was tidy and had no visible plants or artwork. The two experimental slides showed the same office with the addition of either a dog (a Golden Retriever) that was sitting beside the desk or a cat (a Blue Persian) that was sitting on top of the desk. Pictures of the experimental slides are shown in Figures 1 and 2, (pg. 164).

The questionnaire asked participants to rate their first impressions of the office shown in the slide. The first section of the questionnaire provided a series of nine statements to which participants were asked to



Figure 1. Slide used in study: professor's office with dog.



Figure 2. Slide used in study: professor's office with cat.

respond on a six-point scale, from 1 (strongly disagree) to 6 (strongly agree). Four of the statements were taken from Campbell (1979): "I would feel comfortable in this office," "This office is welcoming to student visitors," "This office is very inviting to me as a visitor," and "The professor who occupies this office is busy." One statement was taken from Morrow and McElroy (1981): "The pro-

fessor who occupies this office is friendly." Four additional items were also included to explore more fully students' reactions to the office. These were: "This office seems personal," "This office seems relaxed," "This office seems pleasant," and "I would look forward to spending time in this office." The second section of the questionnaire assessed demographic information such as gender and age. It also asked participants to respond "yes" or "no" to a question asking if they were allergic to dogs and to a question asking if they were allergic to cats. Finally, the questionnaire included two items asking participants to rate their feelings about dogs and to rate their feelings about cats on a six-point scale, from 1 (dislike) to 6 (like).

Procedure

Approval for the research was obtained from the EKU Psychology Department's Research Review Committee. Because the questionnaires were completed anonymously, consent forms were not used. Students volunteered to participate in the study at various times, and several individuals (2–10) participated at each time. When participants came into the laboratory, they were greeted by a female research assistant who read the following script:

You will see a slide of a faculty person's office. Please imagine that this is the office of one of your instructors, and this is the first time you have been to this office. We all have first impressions of people and places based on how they look. I would like you to look at the office in the slide and give me your first impressions. There are no right or wrong answers. Please give your honest impression. Please do not put your name on the questionnaire.

The research assistant randomly chose one of three slides to project onto a screen. Roughly equal numbers of participants viewed the slides of the office with a dog (n=88), the office with a cat (n=84), and the office with no animal (n=85). Participants were then asked to complete the questionnaire. After doing this, the participants were debriefed.

Scoring

A composite score was created to make the data analyses and reporting more concise. Since the items assessing the comfort of the faculty office showed the same pattern of results, a composite was developed from seven variables which were summed and divided by seven. These questions asked whether the office was comfortable, welcoming, inviting, personal, relaxed, pleasant, and would cause one to look forward to spending time in it. Cronbach's alpha was 0.93.

RESULTS

Descriptive analyses were conducted to assess participants' feelings about dogs and cats. Participants were very favorable toward dogs (M=5.3, SD=1.23, on a six-point scale) and moderately favorable toward cats (M=4.2, SD=1.89). Although there were no gender differences in allergies to dogs, allergies to cats, and feelings about dogs, females did like cats more (M=4.4, SD=1.87) than males did (M=3.7, SD=1.87, $F_{(1.255)}=6.45$, p<0.05). Also, participants who were allergic to dogs liked dogs less (M=4.7, SD=2.12)than did participants who were not allergic to dogs (M=5.3, SD=1.13, $F_{(1,253)}=4.94$, p<0.05). Likewise, participants who were allergic to cats liked cats less (M=3.3, SD=2.17) than did participants who were not allergic to cats (M=4.4, SD=1.77, $F_{(1.253)}$ =7.23, p<0.001).

To assess responses to the three offices, data were analyzed with a two-way, between subjects multivariate analysis of variance (MANOVA) using the SPSS program. The independent variables were office pet (dog, cat, or no animal) and gender. (Perceptions of the office did not differ as a function of allergies to, or feelings about, dogs or cats, so these variables were not included in the final analyses.) There were three dependent variables (DVs) which were students' perceptions of office comfort (the composite scale) and students' perceptions of how friendly and busy the professor who occupied the office would be. The results indicate that there were significant differences among the three offices on the dependent measures (Wilks' Λ =0.73, $F_{(6,498)}$ =14.47, p<0.001, $\eta^2=0.15$). Neither the main effect of gender nor the interaction between gender and office pet were significant.

As follow-up tests to the MANOVA, analyses of variances (ANOVA) were then

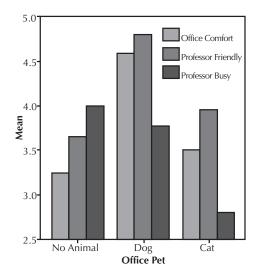


Figure 3. Mean scores for office comfort and professor's friendliness and busyness as a function of office animal.

conducted on each dependent variable. Using the Bonferroni method, each ANOVA was tested at the 0.01 level. There were significant differences among the three types of offices in terms of office comfort $(F_{(2,251)}=26.48,\ p<0.001,\ \eta^2=0.17)$, professor's perceived friendliness $(F_{(2,251)}=18.43,\ p<0.001,\ \eta^2=0.13)$, and professor's perceived busyness $(F_{(2,251)}=15.77,\ p<0.001,\ \eta^2=0.11)$.

Post-hoc analyses to the univariate ANOVAs consisted of pairwise comparisons to determine which offices differed significantly on each of the DVs. Each pairwise comparison was tested at the 0.003 level (0.01 divided by 3). Students perceived the office with a dog to be more comfortable than the offices with a cat and with no animal, which did not differ significantly from each other. Similarly, students perceived the professor who occupied the office with a dog to be friendlier than the professors who occupied the offices with a cat and with no animal, which, again, did not differ significantly from each other. Also, students perceived the professor who occupied the office with a cat to be less busy than the professors who occupied the offices with a dog and with no animal, which did not differ significantly from each other. Figure 3 shows the means of the three dependent variables for the three office conditions.

DISCUSSION

The present study discovered several interesting findings. First, students perceived the office to be more comfortable and the professor to be friendlier when there was a dog in the office than when there was a cat or no animal in the office. There were no significant differences between the offices with the cat and with no animal. These findings suggest that dogs, but not cats, may convey a sense of comfort and friendliness in the office. These findings support previous research suggesting that environments with dogs are perceived more positively than environments without dogs and that the people in those environments are perceived as more relaxed and happy (Rossbach and Wilson 1992). It also supports previous research suggesting that women pictured with dogs are perceived as more likable/nicer than women pictured with cats, and that people pictured with dogs are perceived as less nasty than people pictured without animals (Geries-Johnson and Kennedy 1995; Budge et al. 1996).

The present study also found that students perceived the professors occupying an office with a cat to be less busy than professors occupying offices with a dog or with no animal. Therefore, perhaps, students would feel less hesitant to interrupt a professor with a cat in the office than a professor with a dog or no animal in the office. Professors with cats may be perceived as more approachable.

Although there were no significant differences in perceptions of the various offices as a function of allergies to dogs and cats and feelings about dogs and cats, these variables actually may exert some influence. Of the 14 participants who did not like dogs, only three viewed the slide of the office with the dog. Similarly, of the 17 participants who reported allergies to dogs, only five viewed the office with the dog. Therefore, the results should be interpreted cautiously until they are replicated with a larger sample that includes more participants who do not like, or are allergic to, dogs. However, the larger sample size of participants who did not like cats (n=62) and participants who were allergic to cats (n=42) allows us to be more confident that feelings about cats and allergies to cats do not significantly affect students' perceptions of faculty offices.

This study is not without its limitations. One such limitation is the use of single items to measure professor friendliness and busy-

ness. However, this study was an extension of the studies conducted by Campbell (1979) and Morrow and McElroy (1981), both of which used these single-item measures in their research.

This study leads to a number of future investigations of students' perceptions of faculty offices with and without pets. For example, although the findings of this study suggest that offices with a dog are more comfortable than offices with a cat and offices without an animal, this effect could be due to the particular animals that were photographed and shown to the participants. The dog photographed for the study was an older Golden Retriever, a breed with a large frame and long, blond fur. The cat was a Blue Persian, a breed with a stocky frame, a flat face, and fluffy, long, gray fur. Perhaps other species of cats and dogs would elicit different reactions. In addition, the posture of the animal could also influence the results. In this study, the dog was sitting beside the desk with his head erect and front legs protruding toward the front. The back legs could not be seen from behind the desk. The cat was sitting on the desk on all four paws and facing forward. The animals were photographed in those places because it was thought that most dogs sit on the floor, and most cats, because they are smaller, often climb up and sit on furniture. However, if the cat and the dog were in different positions, as would be the case in real life, visitors' reactions may vary. Visitors' reactions may also vary according to the animal's state of alertness (sleeping or awake), the age of the animal (i.e., puppies or kittens may elicit different responses than mature animals), and the number of animals present (i.e., two or more dogs may be perceived as threatening rather than comforting). Visitors' reactions may also vary according to the professor's gender. Previous research suggests that male cat persons are perceived differently to female cat persons (Perrine and Osbourne 1998). Therefore, a male professor with a cat in his office may be perceived differently to a female professor with a cat in her office. Future studies should examine all of these issues.

In conclusion, this study suggests that professors having a dog in their offices are perceived as friendlier and their offices are perceived as more comfortable than professors having a cat or no animal in their offices. However, having a cat in one's office makes one appear less busy and perhaps more approachable. It is important to note that the

professor does not need to be present in the office for the animal to influence the office visitors' perceptions: students form different impressions of the professor and the office depending on the type of animal in the office, even when the professor is not in the office. These findings provide further evidence that professors may be able to influence students' perceptions of them simply by personalizing their offices with certain items. And what's more personal than a pet?

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