

Human Helping of Animals: What Motivates It?

Lauren E. Highfill & Mark H. Davis

Eckerd College

While considerable research has been carried out to understand helping offered to other humans, relatively little research has focused specifically on the motivations underlying helping for animals. It is possible that the social psychological helping literature may help shed light on the question of human-animal helping, and may provide some ways to investigate this issue. To evaluate this possibility, we provided participants with a hypothetical situation involving an animal in need of help. Participants were asked to imagine that the situation is happening to them, and then to indicate the likelihood that they would provide the needed help. They were also asked to report on the thoughts and feelings that they would experience in that situation. Our results indicated that the same variables that have been used successfully in understanding the motivations underlying the help we offer to fellow humans (obligation, oneness, empathic concern) also successfully predict helping offered to non-humans. Also consistent with the social psychological research on helping motivations, both egoistic and altruistic motives appear to play a role in the helping decisions regarding animals. Thus, initial evidence suggests that this technique may be a valid way of examining the motivations underlying the helping that humans offer to animals.

Keywords: pets, companion animals, empathic concern, oneness, obligation

Correspondence concerning this article should be addressed to Lauren E. Highfill, Email: HighfiLE@eckerd.edu

The amount of care that people offer to their pets is staggering. The American Pet Products Association (APPA) reported that in the U.S. alone, pet owners in 2017 spent \$29 billion feeding their pets (APPA, 2018). In addition to “traditional” dry and canned pet foods, owners also spend a considerable amount of money each year on more expensive specialty foods in order provide a putatively more healthy and nutritious option. Pet owners also spend huge amounts of money each year on medical care for their pets, more than \$17 billion, by some estimates (APPA, 2018). This includes routine veterinary services such as vaccines, spaying/neutering, flea and tick treatments,

and regular checkups. However, it also includes more expensive and specialized medical procedures, including cancer treatments and complicated surgeries. The total amount spent on pet care—feeding, medical care, toys, etc.—for 2018 has been estimated at \$72.13 billion (APPA, 2018).

Beyond caring for one’s pet, people also offer considerable help to animals in general, although perhaps not to the same degree. In 2016, the two largest animal-related U.S. charities (ASPCA; Humane Society) both received in excess of \$100,000,000 in contributions, gifts, and grants; many other organizations received substantial but smaller amounts. Although it

is an imperfect measure since it includes more than just specifically animal-related organizations, in 2017 charities that focus on “the Environment and Animals” received \$11.83 billion, which is about 3% of all charitable donations (Charity Navigator, 2018).

There seems little doubt, then, that humans expend considerable time and money for the benefit of animals. The question addressed in this investigation is a simple one: *why*? One obvious answer is that people love animals, and in particular they love their pets. A variety of factors have been suggested to explain such affection, such as their cuteness (Dale, 2016), stress relieving properties (Friedmann, Thomas, & Eddy, 2000; McNicholas et al., 2005), and companionship (McConnell, Brown, Shoda, Stayton, & Martin, 2011). Certainly animals are capable of evoking strong emotions. Some studies have found that at least under some circumstances people report stronger emotional responses when animals are harmed than when humans are (e.g., Topolski, Weaver, Martin, & McCoy, 2013). Levin, Arluke, and Irvine (2017) have recently argued that the most important factor in such comparisons is the vulnerability of the target, which is determined primarily by its age (puppy vs. dog; baby vs. adult). However, even in that study it was found that an adult dog evoked more empathy than an adult human.

However, “love” is a broad and sometimes elastic term, and as such has limited utility as an explanation for helping. Instead, formal investigations of helping for animals have focused on more specific factors. For example, some studies (e.g., Neumann, 2010) have documented variables that distinguish helpers from non-helpers, such as gender, status as a pet owner, and parental status. Various motives for helping have also begun to receive attention. Neumann (2010) surveyed over 400

volunteers working with an animal welfare organization, and had participants complete the Volunteer Functions Inventory (VFI), a widely used instrument for identifying the motivations of volunteers (Clary et al., 1998). The VFI identifies six categories of volunteer motivation; in addition to such reasons as personal growth and gaining useful experience, the VFI includes the *value* function, in which the volunteer is motivated to act on important values such as humanitarianism and helping those less fortunate. Neumann (2010) found that the value function was the strongest motivation for the animal welfare volunteers.

Motivations for Human-Animal Helping

Although relatively little research has focused specifically on the motivations underlying helping for animals, considerable research has been carried out to understand helping offered to other humans. Thus, it is possible that the social psychological helping literature may help shed light on the question of human-animal helping, and may provide some ways to investigate this issue.

Much of this literature has focused on a fundamental theoretical issue: are humans capable of truly altruistic helping? Some researchers, and in particular Dan Batson and colleagues, hold that under some circumstances people can experience an emotional response to needy targets that is clearly other-oriented, and which motivates the observer to reduce the target’s level of need. The helping that results from this motivational state can therefore said to be altruistic. This other-oriented emotional response is most frequently referred to as empathic concern. Over 40 years, Batson has amassed a considerable body of evidence supporting this position (e.g. Batson, 2011).

Another viewpoint holds that this evidence—although impressive—can be accounted for by egoistic explanations. This position, championed largely by Robert Cialdini and colleagues (e.g., Cialdini,

Brown, Lewis, Luce, & Neuberg, 1997) argues that all motivations for helping are fundamentally egoistic in nature. For example, helping a distressed other can reduce one's own negative emotional state such as sadness or distress (Cialdini, Darby, & Vincent; 1973; Dovidio, Piliavin, Gaertner, Schroeder, & Clark III, 1991). Alternatively, helping might serve as a way to gain rewards, either from external sources (praise, reputation) or internal ones (feelings of pride). Similarly, helping might allow the helper to avoid negative outcomes such as feelings of guilt or shame for not providing aid to a needy target. According to this view, evidence for the link between empathic concern and helping can be entirely accounted for by non-altruistic alternatives.

Although the question is not completely settled, there appears to be a growing consensus that both egoistic and altruistic motivations contribute to helping. In this investigation, we extend this approach to helping for animals; in addition to feelings of empathic concern, we also focus on two egoistic motivations that may be especially relevant for the question of help that is extended to animals. The first of these is a sense of *connection* to the helping recipient, the sense that to some degree the observer and the target are "as one". This sense of oneness is seen as an egoistic motivation because a psychological merging of self and other compromises the view that helping can be truly other-oriented; in essence, if the self and other are merged, how can helping the other be seen as non-egoistic (Cialdini et al 1997)? The other egoistic motive of special relevance is the sense of *obligation* to help. For human targets this obligation may be the result of a variety of factors, chief among them kinship ties (e.g., Stein, 1992). Similar feelings of obligation may also operate with regard to certain types of animal targets, and perhaps especially for pets.

There is reason to suspect that these egoistic and non-egoistic motivations may play a role in prompting the help offered to animals. First, several studies have found that animals in need of help often evoke feelings of compassion and concern in humans (e.g. Furnham, McManus, & Scott, 2003; Westbury & Neumann, 2008). Second, other studies have found that humans report feelings of great closeness for animals—especially pets (Kurdek, 2009). Third, most—though not all—pet owners are likely to experience considerable obligation to care for animals with whom they have chosen to share their lives (Murphy et al., 2013). The fact that animals can prompt each of these motivational states in humans strongly suggests that they may also be important in producing an actual helping response.

The Current Research

It seems reasonable to us that the help offered to animals may be the result of both egoistic and altruistic motivation. That is, humans may offer egoistic help to animals to relieve their own distress, or because of a sense of oneness with the animal, or due to feelings of obligation; they may also offer altruistic help as a result of their feelings of compassion for the animal. To evaluate this possibility, in this investigation we employ a technique used in social psychological investigations, and provide participants with a hypothetical situation involving a needy target; unlike the typical research, in this case the needy target is an animal in need of help. Participants are asked to imagine that the situation is happening to them, and then to indicate the likelihood that they would provide the needed help. They are also asked to report on the thoughts and feelings that they would experience in that situation.

To evaluate the roles played by egoistic and altruistic motives in the decision to help, we designed a study allowing us to examine the question in several ways. In doing so, we borrowed the general

framework of the experimental paradigm used by Cialdini et al. (and adapted by Davis and Maitner, 2019), in which participants were presented with a hypothetical need situation and asked about their likely affective responses and willingness to help. Like Cialdini et al., we included measures of several egoistic motives (distress, sadness, and feelings of oneness); we also included a measure of felt obligation to help. Altruistic motivation was measured in the same way as Cialdini et al., by using several items tapping empathic concern.

In Study 1, the animal in hypothetical need was the person's actual current pet; in Study 2, the animal in need was truly hypothetical—a stray dog. By using these two different targets, we hoped to determine whether the motivational underpinnings of helping for animals vary as a function of the relationship to the animal. In particular, we were interested in the roles played by egoistic and altruistic motivations for helping. Given the exploratory nature of this research, we did not offer formal hypotheses; however, we did expect that some combination of the motives measured here would be significantly associated with likelihood of helping for animals, as they are with humans.

Study 1: Helping for One's Pet

In the first study, pet-owning participants were asked to imagine that their pet was facing a serious medical condition: cancer. We recruited only pet owners because we wanted to make the helping situation as realistic as possible by having the participants imagine their responses to the misfortunes of an actual animal known to them.

Method

Participants and procedure.

Current pet owners were recruited through the Mechanical Turk online platform. A total of 99 individuals (71 male; 28 female) participated in exchange for \$1 compensation. The sample was international

in composition: White Americans ($n = 52$), Asian-Americans ($n = 22$), residents of India ($n = 18$), African-Americans ($n = 4$), and Other ($n = 3$). Respondent age ranged from 21 – 69, with a mean of 30.7. The study protocol was approved by Eckerd College's Institutional Review Board and informed consent was obtained from all participants.

Materials. Participants completed a questionnaire consisting of four parts. In Part 1, to help ensure that all participants actually were pet owners, they were asked the name, age, and species of the pet; if they owned more than one pet, they were asked to choose one, and answer only about that pet. The pet most commonly owned by these participants was a dog (72%), followed by cat (17.2%), and all others (11.1%)

In Part 2, the participants completed two instruments included for exploratory purposes: the Interpersonal Reactivity Index (Davis, 1980, 1983), which measures dispositional empathy, and the short version of the Animal Attitudes Scale (Herzog, Grayson, & McCord, 2015). These exploratory variables are not considered in this paper.

In Part 3, the hypothetical situation was presented. Participants were asked to “imagine the following events as clearly and vividly as you can.”

Recently you have been noticing some changes in your pet. It has lost its appetite and quite a bit of weight. Also, it seems to be sleeping more than usual and has lost its usual level of energy. You take your pet to the veterinarian and are informed that it has lymphoma - a type of cancer. Without any treatment, your pet probably has 4 - 6 months to live.

Your veterinarian informs you that this type of lymphoma can be effectively treated with a surgical procedure to remove the cancerous tumor. The surgery takes a total of 3 hours to

complete and your pet would be back to its normal self within a week or two. However, surgeries like this can be extremely costly as they involve not only the surgery itself, but blood tests, general anesthetic, antibiotics, etc.

Participants then answered several questions. First, they were asked how likely they would be to choose to have the surgery (*compassionate, tender*), personal distress (*alarmed, uneasy, worried*), and sadness (*sad, low-spirited, heavy-hearted*); these were the same items used by Cialdini et al. (1997). All items were answered on 7-point Likert scales ranging from 1 (*not at all*) to 7 (*extremely*). Reliabilities for these emotion measures appear in Table 1, and range from .81 to .90.

Participants then completed the two items used by Cialdini et al. to assess oneness. The first asked them to indicate the “extent to which you would use the term ‘we’ to describe your relationship with your pet” (1 = *not at all*; 7 = *extremely*). The second consisted of Aron, Aron, and Smollan’s (1992) one-item Inclusion of Other in the Self measure consisting of a seven sets of circles overlapping to varying degrees. Participants were asked to choose the set of circles that best described their relationship with their pet. These two items were averaged to create a measure of oneness. Finally, participants answered a question asking “how much duty or obligation would you feel to have this surgery done?” (1 = *no obligation at all*; 7 = *I would feel a very strong obligation*).

using a 7-point Likert scale running from 1 (*not at all likely*) to 7 (*extremely likely*). They were then asked to report the *maximum* amount they would be willing to pay for the surgery.

They then responded to 10 items designed to assess the emotional states of empathic concern (*sympathetic, soft-hearted*,

Finally, in Part 4 participants provided information regarding their gender, age, race/ethnicity, and country of residence.

Results and Discussion

Table 1 displays the correlations among the key variables in the study: likelihood of helping, obligation, oneness, empathic concern, distress, and sadness.¹ Consistent with expectation, helping likelihood was significantly associated with several egoistic motives—obligation, oneness, and distress—as well as with the altruistic motive of empathic concern. The strongest correlate of helping likelihood was felt obligation ($r = .69$); there were also substantial correlations among the various motive variables. The primary analysis was a multiple regression equation in which likelihood of helping was the criterion variable, and the five predictor variables were entered simultaneously: distress, sadness, empathic concern, oneness, and obligation. Thus, any significant association between a predictor and likelihood of helping represents that variable’s unique association with helping, independent of the effect of all other predictors.

Table 1.
Means and Correlations among Key Variables in Study 1 (N = 99)

	1	2	3	4	5	6	Mean	SD	Alpha
1. Helping Likelihood	-	.69**	.41**	.25*	.25*	0.15	5.2	1.85	
2. Obligation		-	.61**	.51**	.50**	.35**	5.55	1.64	
3. Oneness			-	.54**	.59**	.44**	5.5	1.32	
4. Empathic Concern				-	.70**	.72**	5.7	1.32	0.9
5. Personal Distress					-	.77**	5.37	1.51	0.81
6. Sadness						-	5.14	1.61	0.81

Note: ** $p < .001$ * $p < .05$

The overall R^2 value of .50 was significant, $F(5, 93) = 18.73, p = .001$. Only one predictor variable exhibited a significant unique association with helping likelihood—felt obligation ($\beta = .76, p = .001$); none of the other predictors even approached significance (all $ps > .30$). Thus, although several motivational variables were significantly correlated with helping likelihood, only feelings of obligation were uniquely associated with electing to carry out a costly medical procedure for one's pet. The effect of emotional states such as sadness, distress, and empathic concern were all accounted for by the feelings of obligation to help the pet.

Study 2: Helping for a Stray Dog

The results of Study 1 suggest that it is indeed possible to predict the likelihood of help for one's pet using the same paradigm, and the same motivational variables, as those used in the social psychological literature on helping. The size of the R^2 value is comparable to that found in such prior research, and the finding that obligation is the strongest predictor of helping is also consistent with the pattern found in similar research (Davis & Maitner, 2019). Thus, initial evidence suggests that this technique may be a valid way of examining the motivations underlying the helping that humans offer to animals.

In Study 2 we sought to replicate and extend these findings by having participants imagine a scenario in which the needy animal was not a pet, but a less familiar animal. The need situation and the medical choice was the same as in Study 1: agreeing to a potentially costly surgery to treat the animal's cancer. Thus, Study 2 allowed us to evaluate whether feelings of obligation will continue to be the sole predictor of helping when there is no prior connection between human and animal.

Method

Participants and procedure.

Current pet owners were again recruited through the Mechanical Turk online platform. In contrast to Study 1, participation in Study 2 was limited to U.S. residents (so that all respondents would be using a common currency for the item asking about the maximum amount they would be willing to spend). A total of 102 individuals (63 male; 39 female) participated in exchange for \$1 compensation. The sample was largely White ($n = 85$), with smaller numbers of African-American ($n = 10$), Hispanic/Latino ($n = 4$), and Asian-American ($n = 3$) participants. Unlike Study 1, the age item in Study 2 provided respondents with several age categories from which to choose. The age distribution of participants was as follows: 18-25 ($n = 12$), 26-35 ($n = 62$), 36-45 ($n = 18$), 46-55 ($n = 6$), over 55 ($n = 4$).

Materials. A questionnaire almost identical to that used in Study 1 was again employed. The most substantial change was that hypothetical scenario was altered so that the needy animal was no longer a pet. Participants were asked to “imagine the following events as clearly and vividly as you can.”

Recently a stray dog has begun hanging around your house. He is pretty friendly, and enjoys being petted. Although you already have a pet, you start leaving the stray dog some table scraps each evening. After a week or so, you notice that the dog has stopped eating, and seems to have lost some energy. Your neighbor, who is a veterinarian, offers to take the dog to his clinic and do an exam for free.

Your veterinarian friend discovers that the dog has lymphoma - a type of cancer. Without any treatment, the dog probably has 4 - 6 months to live. Your veterinarian friend informs you that this type of lymphoma can be effectively treated with a surgical procedure to remove the

cancerous tumor. The surgery takes a total of 3 hours to complete and the dog would be back to its normal self within a week or two. However, surgeries like this can be costly as they involve not only the surgery itself, but blood tests, general anesthetic, antibiotics, etc. The veterinarian asks if you want to have the surgery done.

Participants then answered the same questions as in Study 1. The wording was changed slightly so that “your pet” was replaced by “the dog”. In addition, participants answered the item asking about the maximum amount they would pay for the surgery using the response scale of 1 (\$0), 2 (\$1 - \$100), 3 (\$101 - \$500), 4 (\$501 - \$1000), and 5 (more than \$1000). Reliabilities for the emotion measures appear in Table 2, and range from .78 to .89.

Results and Discussion

Table 2 displays the correlations among the key variables in the study: likelihood of helping, maximum cost, obligation, oneness, empathic concern, distress, and sadness. Consistent with Study 1, helping likelihood was significantly associated with several egoistic motives—obligation, oneness, and distress—as well as with the altruistic motive of empathic concern. The amount of money that participants were willing to spend displayed a similar pattern, although the correlations with obligation and oneness were somewhat

smaller. There were again substantial correlations among the various motive variables.

It is instructive to note that the mean levels of obligation were higher in Study 1, $t(199) = 3.63, p = .001, d = .51$ as were the feelings of oneness, $t(199) = 5.16, p = .001, d = .73$; people felt more obligation, and greater closeness to, their own pet than to a stray. However, the levels of helping, empathic concern, distress, and sadness did not differ (all $ts < 1.50$, all $ps > .12$, all $ds < .22$). Thus, the plight of the stray dog evoked similar emotional responses to the plight of the pet, despite the diminished feelings of oneness and obligation.

The primary analyses in Study 2 were two multiple regression equations in which likelihood of helping (or maximum cost) was the criterion variable, and the five predictor variables were entered simultaneously: distress, sadness, empathic concern, oneness, and obligation. Table 3 displays the results of these analyses. The overall R^2 values for both equations were significant: for helping, $F(5, 96) = 25.72, p = .001$, and for maximum cost, $F(5, 96) = 6.45, p = .001$.

As in Study 1, the strongest predictor of helping was the egoistic variable of obligation. However, now that the needy target was not a pet, oneness and empathic concern also were significantly associated

Table 2.
Means and Correlations among Key Variables in Study 2 (N = 102)

	1	2	3	4	5	6	7	Mean	SD	Alpha
1. Helping Likelihood	-	.45**	.71**	.61**	.39**	.29**	0.06	4.84	1.85	-
2. Maximum Cost		-	.39**	.31**	.44**	.27**	.24*	3.19	1.05	-
3. Obligation			-	.67**	.41**	.46**	0.13	4.66	1.83	-
4. Oneness				-	.39**	.41**	.25*	4.41	1.65	-
5. Empathic Concern					-	.61**	.64**	5.77	1.22	0.89
6. Personal Distress						-	.73**	5.04	1.48	0.79

7. Sadness - 5.17 1.41 0.78

Note: ** $p < .001$ * $p < .05$

Table 3.

Simultaneous Regression Analyses Assessing the Effect of Egoistic and Altruistic Motives on the Two Helping Variables in Study 2

	Helping Likelihood	Maximum Cost
Oneness	.25**	0.01
Obligation	.49**	.29*
Concern	.24*	.35**
Distress	-0.03	-0.13
Sadness	-0.19	0.07
R^2	.57**	.25**

Note: ** $p < .001$ * $p < .05$

with helping likelihood. With regard to the maximum amount of money that participants were willing to spend on the stray dog, empathic concern was the strongest predictor; obligation had a significant association as well. Thus, for both of the dependent variables in Study 2, the altruistic motive of empathic concern played a significant role. (We also carried out a multivariate analysis in which both likelihood of helping and maximum amount were entered as dependent variables. An identical pattern of results emerged from these analyses.)

General Discussion

The results of these two studies offer support for the following conclusions. First, the same variables that have been used successfully in understanding the motivations underlying the help we offer to fellow humans (obligation, oneness, empathic concern) also successfully predict helping offered to non-humans. The R^2 values found in these studies are similar in size to the values found in earlier research when using the same analytic approach (Davis & Maitner, 2019). Second, and also consistent with the social psychological

research on helping motivations, both egoistic and altruistic motives appear to play a role in the helping decisions regarding animals. In particular, feelings of obligation were very consistently associated with all helping variables; empathic concern was a significant predictor, but in a more limited fashion. Third, it appears that the pattern of motivational forces determining helping for animals may vary depending on the status of the animal; felt obligation is especially important for pets, but altruistic motives play a role in the case of non-pets, for whom less obligation exists.

The Power of Obligation

The strongest and most consistent predictor of helping likelihood in this investigation was the reported degree of felt obligation to help the animal. This pattern is similar to that found by Davis and Maitner (2019) in an investigation examining the motives underlying helping for someone in need of a bone marrow donation. Participants in that investigation were presented with a number of different possible targets, including family, close friends, “generic” strangers, and criminals. They were asked about the same variables employed here—obligation, oneness, empathic concern,

personal distress, and sadness. Across all targets, the strongest and most consistent predictor was the sense of felt obligation. Importantly, this was found for samples of U.S. undergraduates, for online participants, and for a sample of Arab students. Thus, across culture and age, a highly similar pattern of results were found.

The findings in this investigation suggest that obligation is also the most pervasive motive for helping animals, both pets and strays. Davis and Maitner argue that obligation is a powerful predictor because it is a proximal variable to which other, more distal variables contribute. For example, feelings of obligation may result from cultural norms, legal requirements, relationship with the recipient, religious or moral teachings, and others; all of those factors may contribute to the overall sense, in the moment, that one is obliged to offer help.

What might be the sources of obligation for pet owners? One contributor is likely to be powerful feelings of emotional attachment that owners feel toward their pets. The human-pet bond can be extraordinarily strong. People often claim that their pets are their “best friends”, and Kurdek (2009) in fact found that dog owners report being more likely to rely on their dogs for emotional support than their parents or human best friends. This emotional attachment no doubt contributes to the well-established finding that many pet owners consider dogs and cats to be family or psychological-kin (Albert & Bulcroft, 1988; Topolski et al. 2013). They also treat them as such, staying home to care for them when sick (American Veterinary Medical Association (AVMA), 1998), or refusing to give them up—against medical advice—even when allergic to them (Coren, 1997).

Beyond the obligation that is felt due to emotional attachment, pet owners may also feel some obligation by virtue of their role as caretaker for the animal. Some organizations,

such as the American Veterinary Medicine Association (AVMA) have promulgated lists of obligations incumbent on responsible pet owners, such as lifelong care, providing preventive and therapeutic care, providing exercise and mental stimulation, and controlling the pet’s reproduction (AVMA, 2018). In some countries these obligations also have legal force. For example, in England, Wales, and Scotland the Animal Welfare Act of 2006 spells out five broad responsibilities of pet ownership, including adequate housing, diet, and health care. Whether legally binding or not, pet owners seem likely to feel some obligation as a result of their caretaker role.

The Power of Empathic Concern

As in the Davis and Maitner study, in this investigation obligation was not the only predictor of helping likelihood; empathic concern also had unique effects. However, its effect was limited to helping for the stray dog, with no independent effect of empathic concern on helping for one’s pet. Such a pattern may suggest, unsurprisingly, that the forces contributing to feelings of obligation for one’s own pet are more powerful than they are when the needy animal is not one’s own.

In contrast, obligation plays a lesser role in the case of the stray. Although the level of empathic concern experienced for the pets and the stray were almost identical, participants experienced a significantly lower sense of obligation for the stray. To be sure, obligation displayed the highest zero-order correlation with helping likelihood in Study 2, as it had in Study 1. However, in Study 2 empathic concern also displayed a significant unique association with the likelihood of helping. In a sense, it may be that when the sense of obligation is to some degree diminished (as with the stray dog) there is more “room” for other motives—in this case empathic concern—to also display an effect.

Interestingly, this pattern is even more pronounced for the other dependent variable in Study 2: the maximum amount one would spend to help the stray. In this case, empathic concern actually has a slightly stronger unique effect than obligation. (It is possible, although not certain, that a similar pattern would have been found in Study 1 had the monetary variable been usable.) What might account for this pattern? One answer may lie in the difference between a binary decision to offer help (or not) and the perhaps more complex decision about the degree to which one is willing to incur a financial cost while doing so. It is possible that the initial decision to offer help is primarily the result of obligation-related motivations, while decisions about the extent of help are more likely to also result from the degree of compassionate emotion that the target has evoked. Obligation might determine the direction I choose; empathic emotion may determine how far in that direction I will go.

Limitations and Implications

One substantial limitation of the findings reported here is the non-representational nature of our samples. The use of Mechanical Turk produced samples that were predominantly male (71% in Study 1; 63% in Study 2), but there is little evidence that this pattern is representative of all pet owners. According to the Pew Research Center (2010) men and women in the U.S. are equally likely to own a pet (56% of women; 57% of men); thus, caution should be exercised in extrapolating our findings to pet owners in general. Further, the U.S. sample in Study 2 was overwhelmingly Caucasian, which further limits its generalizability.

Despite this limitation, we feel that there are at least two broad ways in which this research may add value to our understanding of human helping of animals. First, it helps provide more nuance to the discussion of what underlies the helping offered to animals; such discussions often involve

overly broad constructs. For example, take love. Clearly people love their pets, and for many people their love for animals extend far beyond those in their care. But love is a complex phenomenon that includes a variety of cognitive, emotional, and motivational elements. The approach taken here separates several constructs—obligation, concern, and a sense of oneness—that probably all contribute to the more holistic experience of love. And importantly, we found that these different constructs vary in their association with helping depending on the particular target involved.

Second, these findings may help in the development of more effective ways to promote animal helping. For example, if obligation turns out to be less powerful as a motivation of helping for non-pets, are there ways in which it could be strengthened? That is, are there ways to emphasize to potential helpers the duty—moral, ethical, religious—of humans to care for animals in need? Alternatively, if emotional responses such as empathic concern are a more powerful determinant of non-pet helping, perhaps interventions designed to promote such helping should emphasize the creation of such emotions. In particular, it would be useful to develop methods for increasing empathic concern for non-charismatic species which might not naturally evoke such responses.

Conclusion

Animals provide us with many benefits: companionship, emotional support, amusement, unwavering devotion (in the case of dogs), and periodic affection (in the case of cats). We in turn provide them with benefits as well. The studies reported here suggest that the motivational underpinning of the help we offer to animals strongly resembles that which underlies our help for fellow humans. In both cases much of our help is determined by how much obligation we feel to provide it. And, as with human

helping, egoistic concerns are not the only factors at play. Under the right circumstances—when the yoke of obligation is to some degree lifted—we also may help out of an altruistic desire to reduce an animal’s suffering.

Footnote.

¹We had intended to include the variable asking the participants about the maximum amount they would pay for the surgery, but were unable to do so. On this open-ended item, respondents frequently answered without specifying the type of currency—dollars, rupees, etc. This oversight on our part made it impossible to use these data.

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