

Vegetarian and Nonvegetarian Children's Judgments of Harm to Animals and Humans

Karen M. Hussar¹ and Paul L. Harris²

¹Psychology Department, Pine Manor College, Chestnut Hill, Massachusetts.

²Human Development and Psychology, Harvard Graduate School of Education, Cambridge, Massachusetts.

Abstract

This research study sought to determine if vegetarian and non-vegetarian children differ in their evaluations of animal suffering as compared to human suffering. In particular, we asked if vegetarian children would be more likely than nonvegetarian children to judge physical attacks against animals as similar to moral transgressions against human beings. To this end, we presented 60 children ranging in age from 7 to 12 years with story cards that depicted humans engaging in physical attacks (e.g., kicking) against animals that could be classified as pets (e.g., dog), farm animals (e.g., cow) or wild animals (e.g., raccoon). For comparison, children were also presented with story cards depicting these same physical attacks against individuals familiar to the participant (e.g., sibling, classmate). Forty of the participants were vegetarian children (20 with vegetarian parents and 20 with nonvegetarian parents), and the remaining 20 participants were nonvegetarian (all with nonvegetarian parents). Unexpectedly, our findings indicated that all participants—regardless of their status as vegetarian or nonvegetarian—condemned physical attacks against the three types of animals and indeed judged such attacks more severely than identical acts against humans. When justifying these judgments, participants tended to focus on the vulnerability of the animals, particularly as the recipients of unjustified acts of violence. In addition, all participants condemned physical attacks against pets very severely and attacks against farm animals less

severely—with wild animals in between. Key Words: Moral reasoning—Social domain theory—Vegetarianism—Animal welfare.

Introduction

Recent headlines describing children's abusive acts toward animals, for example, "This Fair Lets Kids Chase Rabbits, Yank Them up by Their Ears" (Hanson, 2016), suggest that some children have little moral regard for animals. Conversely, other children have made a moral decision to abstain from eating meat based on their concern for animal welfare (Hussar & Harris, 2009; Olthof, 2009). However, the moral stance of the average child toward humans harming animals is less clear. This uncertainty should not be too surprising if we consider the conflicting messaging children receive regarding their treatment of animals ("Don't pull the cat's tail!" "Eat your chicken!") (Melson, 2001). These statements contrast with the relatively consistent messaging children tend to receive regarding their behavior toward other humans ("Stop hitting your brother!" "Don't tease your classmate!"). Consequently, the current study attempts to determine how nonvegetarian children reason about humans harming animals, and how their reasoning compares to the reasoning of vegetarian children. As a reference point, all children also were asked to judge humans harming other humans.

A Review of the Literature

In an effort to provide an alternative perspective to Piaget's stage theory of moral development (Piaget, 1965), domain theorists—namely Smetana and Turiel—categorized children's deontic reasoning into the moral and social-conventional domains. Based on a series of studies in which these social domain theorists analyzed children's judgments about hypothetical situations, they concluded that children differentiate between actions that cause harm to others (moral transgressions) and those that disrupt the social order (social-conventional

transgressions). Moral transgressions may harm others physically (pushing) or psychologically (teasing), or they may involve issues of fairness (cheating) or justice (stealing). By contrast, social-conventional transgressions (not sitting in an assigned seat, yelling in a library) simply disrupt the social order. In general, children judge moral transgressions more severely than social-conventional transgressions, commonly referencing the harm and suffering victims endure as a result of a moral transgression. (For a complete review of this literature, see Smetana, Jambon, and Ball [2014] and Turiel [2006].)

In an attempt to determine how children respond to an action (meat-eating) that might or might not fall into the moral domain, Hussar and Harris (2009) studied children who had made an autonomous decision not to eat meat. That is to say, these children had parents who were nonvegetarians. For comparison, vegetarian children with vegetarian parents and nonvegetarian children with non-vegetarian parents were also studied. The nonvegetarian children interpreted the act of meat-eating as a personal choice. By contrast, the vegetarian children interpreted meat-eating as a moral choice. Similar to the way that children respond to moral transgressions in general, vegetarian children, especially those with nonvegetarian parents, expressed concern for the harm and suffering to animals that meat-eating entails.

Hussar and Harris's findings (2009) offered insight into the moral reasoning of vegetarian children. However, they did not establish what gradations, if any, exist among children's judgments of animal suffering as compared to human suffering. A study by Olthof (2009) indicated that vegetarian children are more likely than nonvegetarian children to conclude that various types of animals (pets, edible, nonedible) suffer in a manner similar to humans. Nevertheless, the nonvegetarian children in Olthof's study still acknowledged the capacity of animals to suffer, even if their suffering is not identical to human suffering. Thus, the findings of this study imply that vegetarian and meat-eating children show some overlap and some divergence in their beliefs about animal suffering.

Other than Olthof's research (2009), there is a dearth of direct comparisons of children's moral reasoning with respect to humans and animals (Melson, 2013). The few studies that do address this comparison have provided information regarding how children—not specifically identified as vegetarian or nonvegetarian—may respond differently to human versus animal suffering. Research by Fonseca et al. (2011) examined the attitudes of fourth grade students toward humans and animals. These children emphasized respect for animal life and treating animals humanely, but they placed greater value on human life. Similarly, when Dunlap (1989) presented preadolescent

boys with comparable moral dilemmas about humans and animals, the boys' moral reasoning, in general, was determined to be more sophisticated (i.e., categorized to a later stage of moral development) when the dilemmas focused on humans.

Previous research has indicated that children consider an additional factor when judging the severity of animal suffering: the type of animal afflicted. For example, the moral reasoning of Dunlap's (1989) participants was more advanced when they considered an animal to which they likely felt emotional closeness (like a dog) or phylogenetic closeness (like a chimpanzee) as compared to an animal (a turkey) that fits neither of these categories. Kellert (1984) found that children had the strongest emotional attachment to individual animals (rather than to a particular type of animal), with this bond being primarily based on a pet-owner relationship. Kellert (1984) also discovered a "naturalistic" attitude among children in which they expressed their interest in wildlife and their fondness for animals living in the woods (p. 48). Similarly, Kahn (1999) found that children and young adults expressed affection for wild animals. During interviews discussing harm to wild animals as a result of environmentally harmful acts (e.g., polluting), Kahn's participants consistently viewed these behaviors as morally wrong, citing the "intrinsic value" of wild animals (p. 103). Nevertheless, Melson (2001) and Myers (2007) concluded that children also intentionally detach themselves from a particular category of animals: those that are raised for food consumption. Melson (2001) described how children utilize an assortment of "distancing strategies" such as not giving farm animals a name (p. 69). Myers (2007) explained that the children he interviewed "declined to identify" with two animals (cow and lamb) that are associated with food (p. 161). Dunlap (1989) noted the range of emotional reactions highlighted by these studies when she acknowledged that "attachment, fear, guilt, awe, or indifference" likely contributed to participants' disparate moral reasoning among various animal types (p. 257).

The Current Study

Building on the research by Hussar and Harris (2009) and Olthof (2009), the current study seeks to determine if vegetarian and non-vegetarian children differ in their evaluations of animal suffering as compared to human suffering. In particular, we asked if vegetarian children would be more likely than nonvegetarian children to judge physical attacks against animals as similar to other moral transgressions. To this end, we presented vegetarian children (some with vegetarian parents and others with nonvegetarian parents) and nonvegetarian children (all with nonvegetarian parents) with story cards that depicted humans engaging in comparable physical attacks

(such as kicking) against various animals (dog, cow, raccoon) and other humans (sibling, classmate). Based on the explanations vegetarian children offered when judging the act of meat-eating (Hussar & Harris, 2009) and their belief that animals suffer in a manner similar to humans (Olthof, 2009), we hypothesized that the vegetarian children in the current study (regardless of their parents' meat-eating habits) would judge physical attacks against animals more severely than would nonvegetarian children. Furthermore, we hypothesized that vegetarian children would judge physical attacks against animals as similar to other moral transgressions. Lastly, we hypothesized that all children (regardless of their vegetarian or nonvegetarian status) would judge human attacks against humans more severely than human attacks against animals. This prediction was based on the findings of Dunlap (1989) and Fonseca et al. (2011), showing that children generally place greater moral emphasis on human life, as compared to animal life. In order to understand the reasoning behind their moral judgments, we asked all participants to reflect on those occasions when they did not judge a comparable physical attack against an animal and human similarly, for instance, kicking a dog as compared to kicking a sibling. Specifically, we asked each participant to explain why she or he judged an attack against one life-form more severely than another.

Assuming that vegetarian children differ from their meat-eating peers in their judgments of physical attacks against animals, we asked if they would differ from their peers when considering physical attacks against different types of animals. To answer this question, we presented participants with story cards depicting identical human attacks against three different types of animals: pets (e.g., cat), farm animals raised for food (e.g., pig), and wild animals (e.g., raccoon). Based on previous research (Dunlap, 1989; Kahn, 1999; Kellert, 1984; Melson, 2001; Myers, 2007; Olthof, 2009), we anticipated that the nonvegetarian participants would judge physical attacks against pets more severely than attacks against wild animals and farm animals and physical attacks against wild animals more severely than attacks against farm animals. We predicted that the vegetarian children would also judge attacks on pets severely. This prediction builds upon Olthof's finding (2009) that vegetarian (and nonvegetarian) children identified pets as the type of animal most capable of suffering. However, we predicted that vegetarian participants would judge attacks against farm animals and wild animals with equal severity. This prediction extends Olthof's finding that vegetarian children did *not* differ in their judgments of edible and nonedible animals' ability to suffer. Thus, we reasoned that vegetarian participants would believe both animal types experience comparable levels of suffering.

Method

Participants

Participants were 60 children ranging in age from 7 to 12 years ($M = 10$ years, 4 months; $SD = 1.71$). Twenty of the participants were identified as family vegetarian children as they had *not* made an autonomous decision to abstain from meat—they had vegetarian parents. An additional 20 participants had meat-eating parents but had made their own decision to abstain from eating meat (independent vegetarians). The remaining 20 children were nonvegetarian, meat-eating children with meat-eating parents. There was an equal number of males and females in each group. All participants lived in suburban neighborhoods of a major Northeastern metropolitan area with two parents and at least one sibling.

Procedure and stimuli

The first author conducted all interviews individually with each participant during a single visit to the participant's home. Before the interview began, participants were told that the researcher was "talking with kids like you to find out what things different children think are OK to do and what things children think are not OK to do." Participants were also told they did not have to answer any question they did not want to and they could stop participating in the interview at any time. In addition, the first author obtained written consent from participants' parents prior to conducting the interviews. Each interview lasted approximately 20 min.

To provide an assessment of children's evaluation of animal suffering, participants were presented in a random order with nine story cards depicting various physical attacks (kicking, pulling a body part, throwing a rock) directed toward animals. The story cards depicted three animals that could be classified as pets (dog, cat, horse), three that could be classified as farm animals raised for food (cow, pig, lamb), and three wild animals that were neither pets nor food (raccoon, monkey, opossum). For comparison, children were also presented with three story cards depicting these same physical attacks against three individuals familiar to the participant (classmate, brother, sister). The gender of the individual carrying out the physical attack matched the gender of the participant (Susan for girls, Sam for boys). All the story cards also included a caption that described the illustrated action. (See Fig. 1 for an example of a story card.) These captions were read to the participants as the cards were presented to them. Subsequently, the interviewer asked participants to judge each action as "OK," "a little bad," "bad," "very bad," or "very, very bad."

After completing this component of the interview, the first author noted each instance when a participant did not judge a comparable

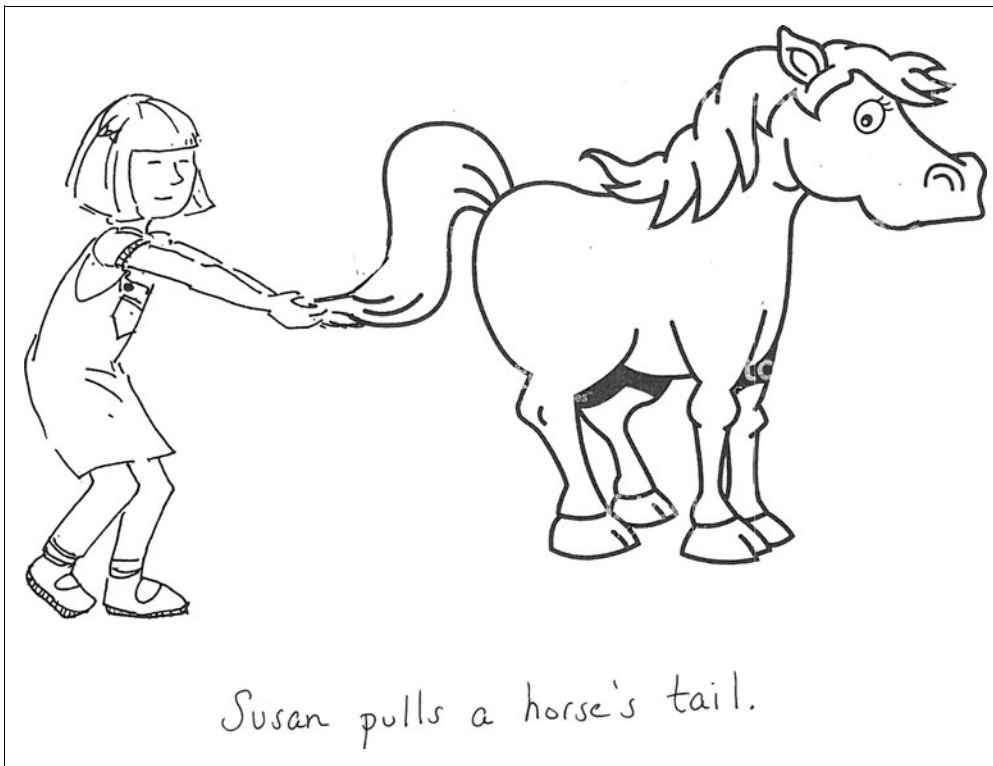


Fig. 1. Example of a story card depicting a physical attack against an animal.

physical attack against an animal and human similarly. She described each of these discrepancies to the participant and then asked the participant to explain why she or he judged the attack against one life-form more severely than another (e.g., "I noticed that you thought it was 'very bad' for Susan to kick her brother but 'very, very bad' for Susan to kick an opossum. Why is that?"). Children's explanations for these inconsistencies in judgments were allocated to five categories: *emotional closeness* (references to the bond that participants expressed toward the victim, e.g., "I love all animals"); *vulnerability* (references to the strength and/or size disparity between the perpetrator and the victim, e.g., "because an opossum is very little; it would go flying"); *lack of provocation* (references to the possibility that the physical attack was not warranted or justified, e.g., "if the horse wasn't doing anything, and she threw a rock, then there would be no reason for her to throw a rock at the horse"); *retaliatory* (references to how the victim might respond to being physically attacked, e.g., "if she pulls the monkey's tail, the monkey might attack her"); and *unknown* (references to occasions when a

participant was unable to articulate why she or he judged a particular attack more severely than another, e.g., "I don't know why I said that").

This method was approved by the first author's institutional review board prior to data collection.

Results

We will first describe children's judgments of the story cards and then turn to children's explanations for discrepancies in their judgments of different living forms.

Children's judgments of the 12 story cards fell into five different levels, scored 0 for *OK*, 1 for *a little bad*, 2 for *bad*, 3 for *very bad*, and 4 for *very, very bad*. Judgments within each domain (pet, farm animal raised for food, wild animal, human) were averaged across the three exemplars so that each participant received an overall score for each of the four domains. (Prior to creating an average score for each of the four domains, the researchers confirmed

that participants did not differ significantly in their judgments of the three exemplars *within* a particular domain.)

Figure 2 shows that, on average, all children (regardless of their status as independent vegetarian, family vegetarian, or nonvegetarian) judged *all* acts of physical assault against animals as "very bad" and indeed as worse than attacks on humans. All three groups of participants judged physical attacks against pets more severely than attacks against wild animals and physical attacks against wild animals more severely than attacks against farm animals.

To analyze the results presented in Fig. 2, a repeated-measures ANCOVA of Domain (pet, farm animal, wild animal, human) \times Group (family vegetarian, independent vegetarian, nonvegetarian) was conducted with the child's age, gender, and pet ownership included as covariates. There was a significant main effect of Domain but no main effect of Group ($p > .10$). Pairwise comparisons confirmed that *all* children judged physical attacks against pets more severely than attacks against wild animals ($p < .01$), physical attacks against wild animals more severely than attacks against farm animals ($p < .05$),

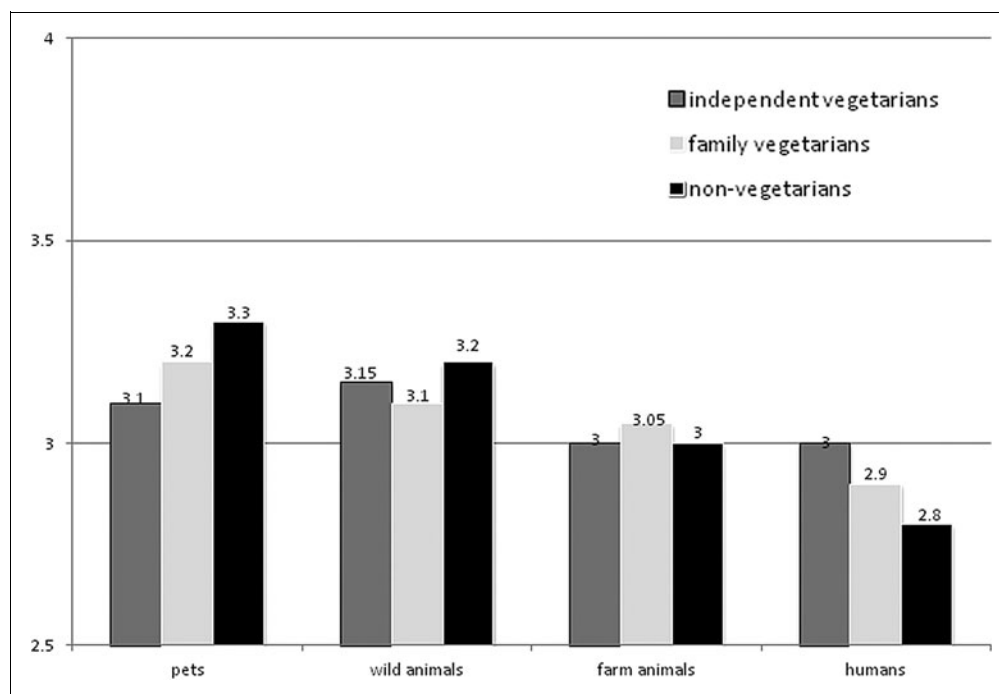


Fig. 2. Average judgments of four Domains (pets, wild animals, farm animals, humans) by Group (independent vegetarians, family vegetarians, nonvegetarians) ($N=60$). Responses reflect a five-point scale where 0 = OK, 1 = a little bad, 2 = bad, 3 = very bad, and 4 = very, very bad.

and physical attacks against farm animals more severely than attacks against humans ($p < .05$). No covariate—age, gender, or pet ownership—was a statistically significant predictor of the outcome ($p = .21$, .27, and .39, respectively).

In summary, children differed in the severity of their judgments depending on the domain under deliberation. This domain sensitivity was equally evident among all children. On average, all children judged the physical attacks against pets most severely; they judged physical attacks against wild animals less severely than attacks against pets but more severely than physical attacks against farm animals; and they judged physical attacks against farm animals more severely than physical attacks against humans. Thus, although children typically judged all physical attacks as similar to moral transgressions (i.e., as “very bad”), they judged physical attacks against animals more severely than comparable attacks against humans.

In order to understand why, on average, participants’ judgments were more severe for attacks against animals as compared to humans, two raters independently coded the participants’ responses

explaining these inconsistencies. Interrater reliability was 0.84, as calculated by Cohen’s Kappa. When the two raters disagreed, they discussed their original coding decision and then reached agreement on the coding category finally assigned. Figure 3 displays the percentage of explanations that referred to one of the five categories outlined in the Method section. (No participant gave an explanation that could be assigned to two categories.)

Figure 3 indicates that references to the vulnerability of the animal occurred most frequently (38%), followed by references to retaliation (22%) and the unprovoked nature of the attack (20%)¹. (References to retaliation were omitted from the analysis because they did not reflect a moral stance toward animals.) The difference in the frequency of references to vulnerability as compared to lack of provocation approached significance ($p = .08$). Participants refer-

enced the emotional closeness they felt toward animals 13% of the time, and their inability to articulate an explanation for their judgment accounted for 7% of the total responses.

Discussion

In this study, we asked if vegetarian and nonvegetarian children differed in their evaluations of animal suffering as compared to human suffering. Given the results, we will address the comparison between vegetarian and nonvegetarian children first, followed by a discussion of how physical attacks against animals relate to moral transgressions in general, then review participants’ judgments of the three animal types, and conclude by focusing on animal suffering compared to human suffering.

¹A post hoc test confirmed that participants were no more likely to reference the “unprovoked” nature of the attack when justifying their judgments for attacks against animals as compared to attacks against humans ($p < .38$).

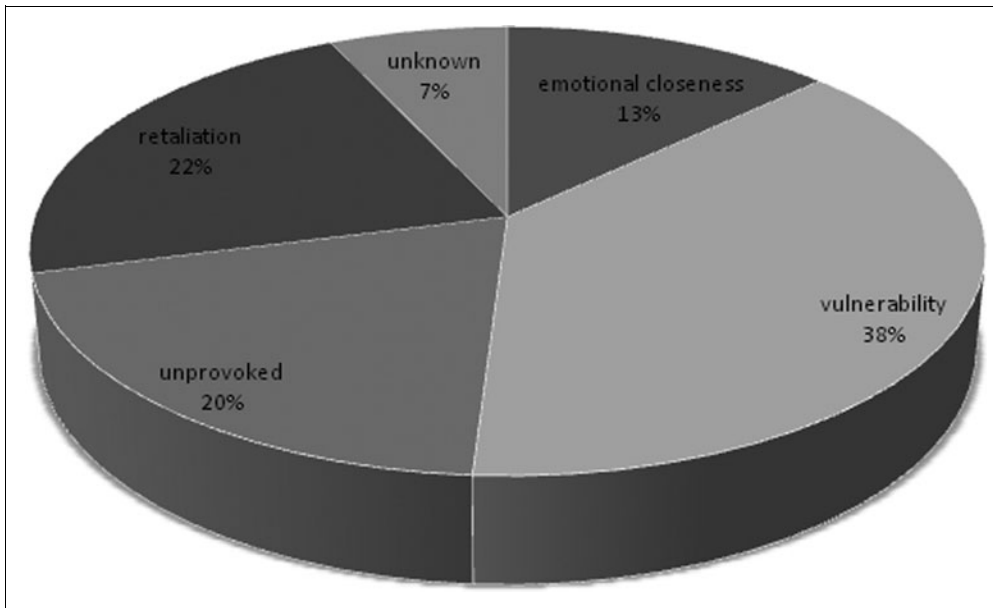


Fig. 3. Percentage of participants offering specific explanations for judging attacks against animals more severely than comparable attacks against humans ($N=60$).

Contrary to our prediction, vegetarian and nonvegetarian children reached similar conclusions regarding physical attacks against both animals and humans. These findings suggest that vegetarian and nonvegetarian children do not differ from one another in the severity of their judgments regarding physical attacks against living organisms. Consequently, when considering what differentiates vegetarian children from their nonvegetarian peers, it does not appear to be related to their interpretation of physical attacks against living organisms, human or nonhuman.

In this study, we also expected to determine if vegetarian children would judge physical attacks against animals as similar to other moral transgressions. In fact, vegetarian children did assess physical attacks against animals as similar to other moral transgressions. On average, they described these attacks as “very bad”—a judgment typically reserved for moral transgressions (Smetana et al., 2014; Turiel, 2006). This is not surprising given that, by definition, a moral transgression is one that inflicts harm on another. Revisiting an argument presented in Hussar and Harris (2009), we contend that the “other” referenced in “harm to another” (Smetana et al., 2014; Turiel, 2006) should be extended to include animals. Notably, our data showed that this argument also applies to nonvegetarian children. They too judged physical attacks against animals as “very bad.”

Although the similar judgments expressed by the nonvegetarian and vegetarian children in the current study may appear to contradict Olthof's (2009) finding that these two groups differed in their patterns of judgment, a close comparison highlights how the two studies examined different aspects of animal welfare. Recall that Olthof asked his participants about animals' ability to “feel bad about something,” whereas the current study asked children to judge the severity of physical attacks against animals. Olthof's participants were not encouraged to focus specifically on physical attacks when considering an animal's ability to suffer, nor were our participants encouraged to consider the amount of suffering an animal endures when judging the severity of a physical attack. By implication, even though

vegetarian children may be more likely to believe that animals are capable of suffering, nonvegetarian children are equally likely to condemn physical attacks against animals.

When considered together, these findings are perplexing because nonvegetarian children are comfortable eating animal products, despite judging attacks against animals as very bad and despite acknowledging that animals are capable of suffering. In his book *Eating Animals*, Foer (2009) offers an explanation for the apparent inconsistency displayed by nonvegetarian children. He argues that, in fact, their behavior is aligned with that of many nonvegetarian adults. They also acknowledge that animals suffer, but they justify their decision to eat meat by concluding that this suffering is not “meaningfully analogous” to human suffering (p. 76). According to Foer, many nonvegetarians—both children and adults—have created an additional “distancing strategy” (Melson, 2001, p. 69) by avoiding a direct comparison between human and animal suffering.

The current study also sought to assess to what extent children judge harm against various categories of animals differently. As expected, both vegetarian and nonvegetarian children judged humans' physical attacks against pets most severely. Our participants occasionally made such comments as “I love cats and dogs. I love all animals, but I love cats and dogs more than any other animals” and

"Horses are my favorite animal" to justify reserving their harshest judgments for human attacks against pets. These statements support Dunlap's (1989) conclusion that emotional closeness is an important factor in children's moral judgments related to animals. However, our participants also frequently made comments like "A dog is smaller than her brother most likely, so it would hurt the dog more," "They [lambs] can get hurt more [than a sister]," and "You can hurt a monkey really badly by pulling its tail." These comments, focusing on the strength and/or size disparity between the perpetrator and the victim or on the vulnerability of the animal victim, are consistent with observations made by Myers (2007). He argued that children adopt a "care orientation" toward animals because of their own feelings of powerlessness as subordinates to authority figures (p. 157). Indeed our participants' statements emphasized the power struggle that they envisaged between these victimized animals and the perpetrators of the attack when justifying their negative judgments. Interestingly, although Myers (2007) discussed this "care orientation" in relation to pets, our results indicate that children are also sensitive to the vulnerable nature of farm and wild animals relative to humans.

With respect to physical attacks against wild animals and farm animals, our predictions were accurate for nonvegetarian children. These children judged physical attacks against wild animals less severely than attacks against pets but more severely than attacks against farm animals. These results support previous research showing that children (not identified as vegetarian or nonvegetarian) are sensitive to the type of animal being harmed (Dunlap, 1989; Kahn, 1999; Kellert, 1984; Melson, 2001; Myers, 2007). Unexpectedly, however, this pattern of judgment was present in vegetarian as well as nonvegetarian children. Even though vegetarian children did not differ in their judgments of edible and nonedible animals' ability to suffer (Olthof, 2009), they, like nonvegetarian children, differentiated between pets, wild animals, and farm animals. These findings imply that we cannot explain the decision of vegetarian children not to eat meat in terms of any distinctive stance toward attacks on edible animals. They agreed with nonvegetarian children in judging such attacks as somewhat less bad than attacks on wild animals and pets.

Although we did not predict these results for the vegetarian participants, Myers (2007) offers an explanation as to why *adults* (not specifically identified as vegetarian or nonvegetarian) would display this pattern of results: "[Adults have] overly sentimental feelings toward pets, coupled with dismissal of animals we exploit and indifference toward other wild species" (p. 164). However, this explanation does not appear to be applicable to our participants. The children in the current study were not "dismissive" toward farm animals nor "indif-

ferent" toward wild animals. For example, the following statement made by one participant does not suggest indifference: "Well, the monkey is a wild animal, and that isn't right." This declaration is representative of the majority of our participants who judged physical attacks against wild animals and farm animals as moral transgressions ("very bad"). Therefore, even if our participants reserved the strongest moral condemnation for physical attacks against pets (regardless of whether or not they owned a pet), this does not imply that they condoned physical attacks against wild animals and farm animals. Instead, our results suggest that children judged all attacks against animals as similar to moral transgressions, while simultaneously showing some sensitivity to the type of animal involved.

Unexpectedly, our findings indicate that *all* children—irrespective of their status as vegetarian or nonvegetarian—judged physical attacks against the three types of animals (pet, farm animals, wild animals) more severely than identical acts against humans. In other words, our participants judged that a human physically harming an animal is worse than a human physically harming another human. Why are they taking this moral position? It may be related to Olthof's (2009) finding that children—both vegetarian and nonvegetarian—reported more animal-oriented than human-oriented compassion. We know from the current study as well as previous research (e.g., Dunlap, 1989) that children form an emotional bond with animals. A next logical step would be for children to "care about ... the conditions that affect his or her [the animal's] well-being" (Myers & Saunders, 2002, p. 154). Certainly, our participants expressed concern regarding animals' well-being through their spontaneous comments regarding the vulnerability of the animals being attacked (e.g., "because the brother is bigger and I feel like a brother might be stronger [than a cow]"). Hence, participants' severe judgments of humans acting aggressively toward animals can be attributed to the compassion they feel toward these vulnerable animals.

In summary, our participants judged humans' physical attacks against animals more severely than identical acts against humans because they were particularly sensitive to unjustified acts of violence against these vulnerable animals. These judgments occurred among *all* participants, regardless of their status as vegetarian or nonvegetarian and pet owner or non-pet-owner.

Future Research

The current study focused on three types of animals (pets, farm animals, wild animals) with the particular animals varying across these three types. However, it would be possible to control for this between-type variation by presenting animals (e.g., rabbit, pig, chicken) that could be categorized as a pet, farm animal, or wild

animal when introduced with an appropriate narrative. If the results of this proposed study were similar to the current one, then we could be assured that the participants' judgments are based on the designation of the animal (pet, farm, wild) as opposed to the particular characteristics of the animal.

It would also be informative to compare the questions posed in Olthof's study (2009) with those posed in the current study. In a counterbalanced study design, both vegetarian and nonvegetarian participants could be asked about the ability of different types of animals to suffer as well as the acceptability of physical attacks against these animals. This would allow researchers to determine whether or not there is a correlation between children's understanding of various animals' ability to suffer and their judgments of physical attacks against these same animal types. An additional group of participants could be presented with information regarding the extent to which the animals suffered while being physically attacked in order to determine if simultaneously considering both suffering and attacks impacts the severity of participants' judgments. Furthermore, in order to ensure that all participants judge the story card characters' actions with the same level of responsibility, the character's intent (intentional without justification) could be explicitly stated prior to participants judging the attacks.

Finally, future research could include an additional category of victims, specifically, vulnerable organisms. Recall that we argued participants may have judged the physical attacks against animals more severely than attacks against humans because the participants may have been aware of a power differential between the human attacker and his or her victim. Future research could easily test this hypothesis by introducing human and animal victims who are likely to be perceived as vulnerable, for instance, a newborn, an elder, one who is disabled. If participants were to display a pattern of judgment toward these susceptible individuals that is similar to their stance toward animals, this would lend support to our hypothesis that the participants are sensitive to the imbalance of power between our fictional humans and animals.

Authors' Note

This research study was funded by the Animal Welfare Trust. The authors thank Chen Wu for his assistance with coding and Diane Juster for her valuable feedback on an earlier draft of this paper. Portions of this paper were delivered at the 55th Annual Meeting of the New England Psychological Association, October 10, 2015, Fitchburgh State University, Fitchburgh, MA.

Author Disclosure Statement

No competing financial interests exist.

REFERENCES

- Dunlap, J. J. (1989). Moral reasoning about animal treatment. *Anthrozoos*, 11, 245–258.
- Foer, J. S. (2009). *Eating animals*. New York, NY: Back Bay Books.
- Fonseca, M. J., Franco, N. H., Brosseon, F., Tavares, F., Olsson, A. S., & Borlido-Santos, J. (2011). Children's attitudes towards animals: Evidence from the RODENTIA project. *Journal of Biological Education*, 45, 121–128.
- Hanson, H. (2016). This fair lets kids chase rabbits, yank them up by their ears. *The Huffington Post*. Retrieved from http://www.huffingtonpost.com/entry/rabbit-scramble-tippahcounty-fair_us_579a6a57e4b0e2e15eb50f00?utm_hp_ref=animal-cruelty
- Hussar, K. M., & Harris, P. L. (2009). Children who choose not to eat meat: A study of early moral decision-making. *Social Development*, 19, 627–641.
- Kahn, P. H., Jr. (1999). *The human relationship with nature: Development and culture*. Cambridge, MA: MIT Press.
- Kellert, S. R. (1984). Attitudes toward animals: Age-related development among children. In M. W. Fox & L. D. Mickley (Eds.), *Advances in animal welfare science 1984/85* (pp. 43–60). Washington, DC: The Humane Society of the United States.
- Melson, G. F. (2001). *Why the wild things are: Animals in the lives of children*. Cambridge, MA: Harvard University Press.
- Melson, G. F. (2013). Children's ideas about the moral standing and social welfare of nonhuman species. *Journal of Sociology & Social Welfare*, 40, 81–106.
- Myers, G. (2007). *The significance of children and animals: Social development and our connections to other species* (2nd ed.). West Lafayette, IN: Purdue University Press.
- Myers, O. E., & Saunders, C. D. (2002). Animals as links toward developing caring relationships with the natural world. In P. H. Kahn Jr. & S. R. Kellert (Eds.), *Children and nature: Psychological, sociocultural, and evolutionary investigations* (pp. 153–178). Cambridge, MA: MIT Press.
- Olthof, T. (2009, July 2–4). *How to explain vegetarian children's morally grounded decision not to eat meat?* Paper presented at the 35th Conference of the Association for Moral Education (AME), Utrecht, The Netherlands.
- Piaget, J. (1965). *The moral judgment of the child*. Glencoe, IL: Free Press.
- Smetana, J., Jambon, M., & Ball, C. (2014). The social domain approach to children's moral and social judgments. In M. Killen & J. G. Smetana (Eds.), *Handbook of moral development* (2nd ed., pp. 23–45). New York, NY: Psychology Press.
- Turiel, E. (2006). The development of morality. In N. Eisenberg (Ed.), *Handbook of child psychology* (Vol. 3, pp. 789–857). New York, NY: Wiley.

Address correspondence to:

Dr. Karen Hussar
Psychology Department
Pine Manor College
400 Heath Street
Chestnut Hill, MA 02467

E-mail: khussar@pmc.edu

Received: August 15, 2017

Accepted: November 24, 2017